Geographic Studies Series (17)

Selected Topics on Development and Political Geography of the Sudan

Prof. Samir Mohammed Ali Hassan Alredaisy

First edition
2025 AD

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I extend my sincere thanks, great appreciation and gratitude to the Center for Research and Studies of the Red Sea Basin countries - Sudan, and the Arithria House for Publishing and Distribution to honor them by publishing this book ...

The author

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Introduction

This book works on to depict and discuss some selected topics of the development and political geography of Sudan which could be viewed as serious problems and insisting challenges to its geographic existence as a unified State.

The topics on developmental geography of Sudan included the common demographic and ethnic and genetic origins of population; features of the administration and education systems and immigration; the theoretical bases of Sudanese development planning 1899 – 1993; the regional development policies in Sudan, and their impacts1899 – 1993; the impacts of the theoretical bases of Sudanese development planning from 1898- 1990; the impacts of regional development policies on agricultural development 1899 – 1993; and the impacts of climate change in Sudan.

The topics on the political geography of Sudan included the formation of Sudan's geographical map; the physical geography of Sudan a source of State power; utilization of natural resources of Sudan a source of internal and external threats; the emergence and intellectual bases of Sudanese political parties; the failure of political parties to achieve political governance in Sudan; plans of international imperialism for the division of Sudan; peace efforts in Sudan and a proposed geographical strategy to remain a Unified State

These topics collectively give a comprehensive scene of the developmental and political problems and challenge to the present Sudan and its future to remain as a unified political and geographic State. Therefore, it is insistently important for further writing by authorized researchers to contribute further to suppressing the insisting problems of Sudan and to build future stable and progressing country.

Samir Mohamed Ali Alredaisy
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March 2025

1

Some common demographic, ethnic, and genetic Origins of Sudan's population

1

Some common demographic, ethnic, and genetic Origins of Sudan's population

Sudan is characterized by demographic characteristics that place it on the list of societies with rapid population growth and the predominance of young age groups. Similarly, there is a diversity of its .tribal and ethnic composition

An ethnic group is defined as "a group of people who shares the same culture, beliefs, values, behaviors, language, religion, and ancestry or other characteristics that are passed down from one generation to the next. They may come from the same country or live together in the same area" (NCI, 2023). A racial group is a group of people known by their reference to race, ancestry, color, nationality (including citizenship, or ethnic or national origins (Law-insider, 2023). Race is considered a social concept, not an ethnic concept, and the world's population is no longer classified racially but rather is classified into population groups, most of which share their genetic genes (Hussein, 2015).

The concept of genetic ancestry refers to information about the people from whom a person is biologically descended, including their genetic relationships. Genetic information can be combined with historical information to extrapolate where an individual's ancestors lived (Genome, 2023). Inheritance is also called biological inheritance, which is the passing of traits from parents to children through sexual or asexual reproduction, where the cells of the embryos acquire the genetic information of their parents (Wikipedia, 2023).

1. Some demographic characteristics of the Sudanese population

Sudan ranks thirty-fifth in the world in terms of population, third in the Arab world, and ninth in the African continent. According to the 2008 census, the population is estimated at approximately 39.3 million people, including 20,073,977 males (51.3%), and 19,080,513 females (48.7%), with an annual growth rate of 2.7% and a life span estimated at approximately 56 years, 57 for women and 55 years for men. The age group under 15 years represents 42.6% of the total population, which makes it a young society. However, adding 5.2% of those over the age of 60 years raises the dependency ratio to 47.8% of the total population, given that they are two unproductive groups. As for the sex ratio, the number of males reached 105 per hundred females for those under the age of five, 109 for those under the age of ten, and 100 for the broad category of 15-64 years, while this ratio decreased, as expected, for the population over the age of sixty-five years. (Figure 1).

The crude mortality rate was 11.5 deaths per 1,000 population, and the mortality rate for children under five was 68 deaths per 1,000 children. There has been a noticeable decline in the crude death rate in Sudan since the first population census in 1955/1956 (26 deaths per thousand). The population of Sudan increased between 2008 and 2019 to reach about 43 million people, while maintaining the same previous demographic characteristics of sex and age distribution. As for population density, it increased by in the period between 1993-2008 by 52% (Al-Habbari, 2019) and reached 2-3/km2 in desert and semi-desert areas, and about 218-230 individuals in work areas and rich savannas (Embassy of the Republic of Sudan, Riyadh). This is considered a low population density, as the general density is 24.7 individuals/km2, yet it has more than quadrupled in the last five years (2020 information). The urban population tripled between the 1956 and 1973 censuses, reaching 20.5% in the 1983 census, 29.2% in the 1993 census, and 49% in 2010. As for the rural population, despite the increase in their absolute number, their share in the percentage of Sudan's population decreased from 78% in 1955-1956 to 60% in 2008.

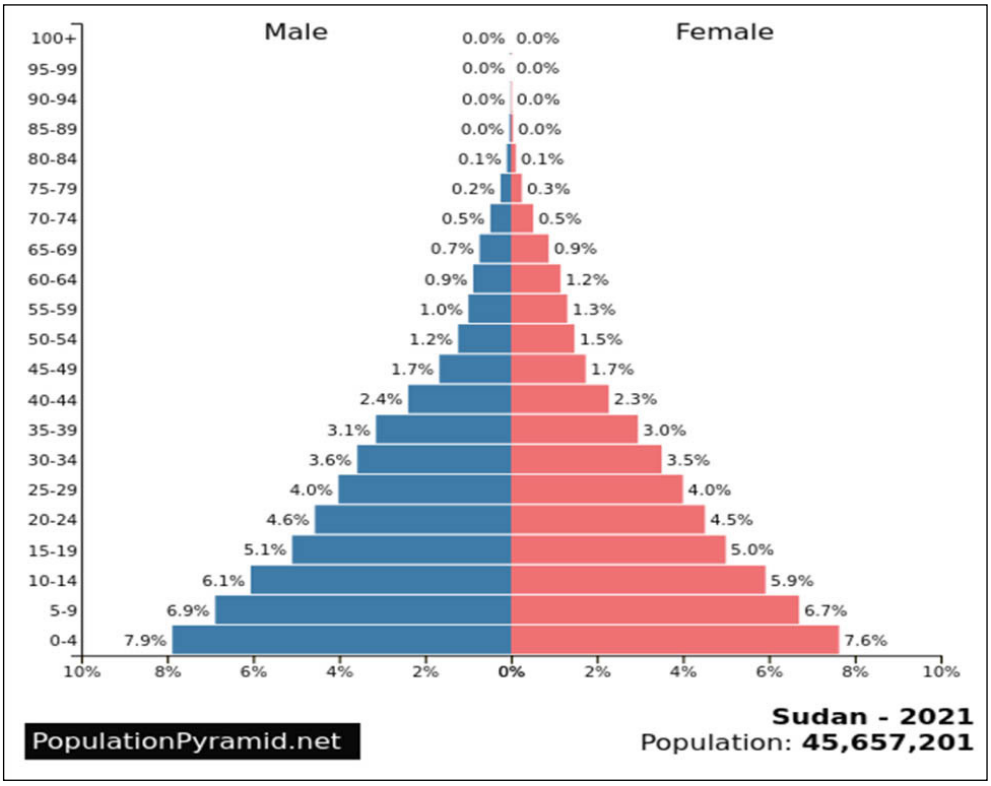

Figure 1: Sudan's population pyramid - 2019 AD

2. The ethnic origin of the Sudanese tribes

The population of Sudan consists of a large number of tribes distributed over it (Figure 2), approximately 570 tribes, divided into 57 ethnic categories based on ethnographic, cultural, and linguistic characteristics. They live in cultural and geographical borders and regions in which they practice multiple cultural and religious customs and traditions linked to Islam, ancient African beliefs, and Christianity. These tribes resulted from the mixing of Hamites, Semites, Nilotic, Bantu, and Arab tribes alongside Nubians of ancient Cushitic or Pharaonic origins (Al-Hussein, 2014). They speak more than 400 languages and dialects since Sudan took the form of a unified state during the British colonial period (Idris, 2005). The ancient Nubian race inhabited Sudan during the Stone Age (8000 BC-3200 BC) (Wikipedia, 2020).

Figure 2: Geographical map of Sudan

Source: https://www.nationsonline.org/oneworld/map/sudan_map.htm

North and South Kordofan are inhabited by tribes of Arab origin, including the Hawazma, Awlad Hamid, Misseriya, Kenana, Bani Fadl, and Kababish. It is likely that they traveled through ancient desert valleys to reach these areas, especially since they were pastoral tribes that moved wherever pasture and water were available (Alredaisy, 2019). The Arabs and Negroes living in some villages in Kordofan and Darfur are considered less permanent compared to those in the Nilotic villages in the Northern Governorate, and many of the administrative units, mayors, and sheikhdoms consist of a mixture of settlers and Bedouins. The degree of social difference is more evident in the three southern governorates compared to the six northern governorates, as

evidenced by the presence of a large number of languages and tribes. This difference can be explained by the prevalence of a self-sufficient economy there, where 27% of the population lives in villages or in huts scattered in the forests. In southern Sudan, there is nomadism, but it differs from what exists in northern Sudan (Hanin, 1963).

The Nuba tribes live in the state of South Kordofan and up to the Abyei area (Figure 2), and a few Burqo, Zaghawa, Maidob, and Burqad live with them. The inhabitants of the Khoi are known as the Hawites in the ancient Nubian language. The Khoi include the desert region located east of Nubia and west of Kordofan and Darfur. The Nuba tribes are divided into ethnic groups according to language. The are the Kawalib, the Nemanj, the Talodi, the Miskin, the Lfofa, the Taqli, the Kadugli, the Temen, the Katla, the Alajanji, the Dajo, and the Dawalib. Among the Ajanj group, there are the Kuru, Kadru, Karko, Venda and Kadur tribes. The Nubians called themselves “Umawis” after the mother, as they lived in the Amada region, south of the First Cataract, in the Aswan district, which is known by the same name. The Ghalfan, Kadru, Tema, and Six Mountains tribes in the northern Nuba Mountains have linguistic connections to the Halfawi in northern Sudan, just as the Nuba Kasha tribes near Abu Zabd agree with the Danagla in northern Sudan (Hussein, 2012).

The states of Darfur are currently inhabited by many tribes, most of whom are descended from ancient races that inhabited the desert or migrated to it in subsequent centuries. West Darfur state is inhabited by about fifty-three tribes, including the Masalit, Fur, Qamar, Tama, Mahadi Al-Ataria, and Al-Ertqa. South Darfur State is inhabited by more than eighty-three tribes, the most important of which are the Saada, Burqo, Al-Yaqo, Ambroro, Rizeigat, Habbaniya, Beni Halba, Salamat, Ma’alia, and Ta’isha (Figure 2). North Darfur also inhabits the Berti, Fur, Zaghawa, Rizeigat, Tunjar, Mimar, Maidob, Ziyadia, and Dajo.

The presence of tribes whose origins probably go back to ancient desert dwellers or who migrated from the Nile Valley to these areas. This appears more in northern Darfur than in any other part of it, such as

the Medob and Zaghawa. The Midob nationality lives in the state of North Darfur, which is located between longitudes 024-27 degrees east and latitudes 12-20 degrees north. Thus, it is located parallel in width to the central Nilotic Sudan and adjacent to the Sudanese-Libyan border. As for the ethnic origin of the Medob, there are those who believe that they are descendants of Tahraqa (Wikipedia, 2019) and that they belong to the Nubian origin and speak a language similar to the language of the Nilotic Nubians. As for the Zaghawa tribe, they are found in Wadi Hawar, and their area extends between Chad and Sudan from north of the city of Kutum to eastern Chad and the city of Kufra in Libya. Some trace their origins to the Hamitic barbarians "Berbers" who are the ancient Libyan people, and they came into contact via the Mediterranean Sea with the ancient Phoenician, Egyptian, and Nubian civilizations. The Zaghawa call themselves the word "Birri," and they divide the Berri into three large sections: Al-Wiqi, Al-Ta'ba, and Al-Wubara. All that remains of the ancient Zaghawa are "Al-Hadahid," who live an isolated life among the Zaghawa themselves and speak a language that no one else understands (Chisels, 2019).

3. Genetic origins of the Sudanese population

Human inhabitation of Sudan dates back to ancient times. The first Singa skull lived in the Pleistocene Stone Age more than 160,000 years ago in the Singa region in central Sudan. It coincided with the Neanderthal man and the Pekingese man who lived in the rainy period. It was considered the oldest human until 1939 when Ancient human traces of two people, "Australopithecus Africanus," who lived 180,000 years ago were discovered in South Africa (Wikipedia, 2020).

All residents of the African continent are considered Africans, as there is no single population group or race in Africa. Rather, there are multiple population groups or races that differ in their natural characteristics, such as color, the nature of the hair, the shape of the skull, nose, jaw, and eye color. The African people are considered to have diverse genetic lineages, as they share the global genetic lineages that are present in the genetic lineages of the world's population. The African

people also share 60% with the European people. There is no tribe or population group in Africa that does not belong by genetic kinship to some other population group (Al-Hussein, 2012).

The genetic study confirms that the largest continent today in terms of diversity in the genetic features of its human population is Africa. The main features of the world's peoples are due to their contemporary genetic features, all of which are due to a small percentage of the genetic characteristics available on the African continent today. The difference in human faces around the Earth is due to characteristics acquired from different environments. All humans share 99.9% of the genetic map, and what remains, which is the thousandth part, is responsible for all forms of apparent differences between humans (Hammer, 2006).

The Sudanese tribes outlined in this text, according to modern scientific research, confirm the existence of genetic mixtures among them. The mixing between these Sudanese tribes appears in the genetic map of the Sudanese, which is characterized by the two elements of antiquity and continuous communication. It has been proven that 90% of Sudanese women carry genes that have been connected without interruption for a hundred thousand years (Hussein, 2015). The Copts show a common ancestry with the people of North Africa and the Middle East, and the southwestern group, which includes the Darfurians, the Nuba, and some Nilotic tribes, shares genetic traits with the people of sub-Saharan Africa.

The northern group, which includes the Beja, Ethiopians, Arabs, and Nubians, shows the genetic components of the North African population, and the southwestern group with the predominance of the North African population component, which is about 70%. The Fulani show Sudanese ancestry (> 45%) compared to North Africans (< 40%) or Sub-Saharan populations (< 15%), with the value of their "K" component appearing as K=5 (mediatekstore.com. 2023).

The Nuba tribes are considered to have ancient Negro origins. Some of them mixed with the Hawazma, who are of Arab origin, resulting in

the transmission of genes from Nubia to the Hawazma (Bauomi et al. 1987,). McMichael believes that the movements of the peoples who came from South Darfur and Kordofan in the first centuries AD, and who were known in Greek sources as Nubia and invaded the lands of the Kingdom of Meroe in the areas of Geziera and Al-Butana and along the Nile north of Khartoum, are the same lineage as the inhabitants of the Geziera in the second century BC. They are the same dynasty of the black people defeated by Cestius III in the last quarter of the nineteenth century BC in the Wadi Halfa region (The True Sudan of Kush, 2015).

The population of northern Sudan, between Khartoum and the First Cataract, belongs to one human element, the “Zudhairi”, a Hami element. The inhabitants of these areas are called Nahsiu or Nahsi, Al-Tamha or Al-Tamha, and Arat, referring to the areas located to the west of the Nile, and it is possible that some of their descendants live in northwestern Darfur. The Medob area may be the remnants of the Arati, and the Tama in northwest Darfur may be the remnants of the Tamah. The popular Tama narratives mention that they lived in the Bir al-Natrun area, which is a barren desert. These groups were known as the first group culture (Al-Hussein, 2012).

The inbreeding coefficient for the Fur and Baggara tribes, which are geographically adjacent, is 0.04167 and 0.04450, respectively, and the high degree of genetic cross-breeding between the two tribes is found on the Jebel Marra plateau. (Bayoumi et al., 1985). The Nuba tribe is considered an ancient tribe of Negro origin, while the Hawazma tribe is descended from Negro-Arabs. The results obtained from social practices agree that people descended from the mixing of the Hawazma and the Nuba together are considered members of the Hawazma tribe who are descended from Arab origins, resulting in the transmission of genes from the Nuba to the Hawazma (Bauomi et al. 1987,). This confirms that ethnic mixing between the two groups can be seen as a process of gene transmission from the Nubia to the Hawazma, even though the Nuba are the old indigenous group while the Hawazma are the new settlers (Bauomi et al. 1987).

Genetic divergence analysis was also conducted among seven tribes from Sudan, which included three Negro tribes, namely the Nuba, Fur, and Nilotic, and four Arab tribes, namely the Beja, Ja'alin, Hawazma, and Misseriya. It was found that the Nuba and Nilotic have Negro genetic characteristics, while it was found that the Fur are intermediate between Arabs and Negroes, and the Ja'alin and Beja have Arab genetic characteristics. It is very clear compared to Hawazma and Misseriya, which have great Negroid admixture (John et al., 1988).

There are genetic commonalities among all Sudanese tribes. What distinguishes the genetic map of the Sudanese are the two elements of antiquity and connectivity, as it has been proven that 90% of Sudanese women carry genes that have been connected without interruption for a hundred thousand years. It was also found that the Sudanese alone carry the genetic characteristics of the "Laps" ethnic group that lives in northern Norway (Hussein, 2015). Thus, they do not differ from other neighboring peoples, as it was found that the genetic makeup of Egyptian citizens includes 68% from North Africa, 17% from Arabs, 4% from Jews, and 3% from East Africa, Asia Minor, and Southern Europe. Arab genes are found in a number of residents of non-Arab countries, such as Georgia (5%), Iran (56%), the Luhya people in Kenya (2%), Ethiopia (15%), and Ashkenazi Jews (10%) (Hanna, 2017).

When classifying the world's population according to Y-DNA, the A strain is widespread in Sudan and Ethiopia. It constitutes 42.5% of the Sudanese genes, while the K2 strain, which was born in what is currently known as Iran and spread horizontally until it reached Egypt, constitutes 18% of African Fulbe tribes (Azamiel, 2018.). There is a fundamental ethnic, cultural, and linguistic difference among citizens living in East Africa, Sudan, and the Nile Basin. The region around the Nile Valley is characterized by a long history of successive movement of various population groups that combined with demographic and migration events. This resulted in a strong genetic composition among humans in this region. A study among a group of Sudanese representing various ethnic and linguistic groups found that the combined power

of exclusion was 0.9999981, and the combined match probability was 7.4 x 1017. These results were linked to previously published data on genotypes from Egypt, Somalia, and the Karamoja people from Uganda (Azamiell, 2018).

The citizens of northern Sudan are grouped together with the Egyptians, while individuals from southern Sudan are grouped together with the Karamoja people. The similarity between the Nubians and the Egyptians suggests that the two-way migration that occurred along the Nile Valley gathers historical evidence of long-term overlap between Sudan and Nubia. Despite the levels of Sudanese population structure, standard forensic statistics are considered excellent tools for individual identification and parental analysis in Sudan (Babiker, et al. 2011). The identification of the genotype among Sudanese according to the distribution of the C345T SNP confirmed that Sudanese resemble Africans. This observed difference between them exists in dimensions that have been observed in other population groups (Salem, et al.2014).

Different ancestors have been discovered among the population of Sudan. The Copts show a common ancestry with the inhabitants of North Africa and the Middle East, which supports the common ancestry with Egypt, while the southwestern group, which includes the “Darfurians” and Nuba, shares a component descending from the Nilotic ancestry of sub-Saharan samples. The northern group, which includes the Beja, Ethiopians, Arabs, and Nubians, shows both components, although the main component (about 70%) is that which has been discovered in North Africa and the Middle East. The Fulani show Sudanese ancestry (> 45%) compared to North African (< 40%) or Sub-Saharan (< 15%) which show their own component of K=5 (mediatekstore.com.2023).

A study of the Y chromosome in 15 groups of Sudanese using the Y-haplogroups method for 455 males representing these groups showed that they are not related to each other and represent the three linguistic families in Sudan. The study showed that haplogroups A, B, and E are found primarily in groups that speak the Nilo-Saharan lan-

guage, which includes the Fur, Burqo, and Masalit, while haplogroups F, I, J, K, and R are found among groups that speak African-Asian languages, which include Arabs, Beja, and Copts, the Hausa and Niger-Congo speakers of the Fulani ethnic group (Hisham et al. 2008).

The weight of genetic variation is a result of recent migrations and demographic events that occurred primarily in Asia and Europe. Evidence of this is the high migration rates of Afro-Asiatic speakers compared to the Nilo-Saharan language family, where the large population size is considered the biggest influence for the first group. This has resulted in Sudan being characterized by the most heterogeneous societies in the world. (Bechtold, 1990).

References:

- Al-Habbari, Iman. 2019. Sudan's population. Mawdoo3.com (Arabic).
- Al-Hussein, Ahmed Elias. 2012. A project to study the history, genes, and languages of the Sudanese population, and the genetic lineages of the African population. (Arabic).
- Al-Hussein, Ahmed Elias. 2014. On the origins of the population of Sudan-12. Sudanil, (Arabic).
- Alredaisy, S. M. A. H. 2019. Ancient desert valleys: routes of geographical communication between the Nile Valley and western Sudan. Bakht al-Rida University Scientific Journal 29: 5969-. (Arabic).
- Azamiell.2018. Learn about the classification of human races around the world according to Y-DNA genes. Chisels azamil.com (Arabic).
- Bayuomi, R. A., Nilmani, S.1987. Some blood genetic markers of the Nuba and Hawazma tribes of Western Sudan. American journal of physical anthropology 73 (3): 379388-.

- Bechtold, P..1990. More turbulence in Sudan: a new politics this time?. Middle East Journal 44 (4):579595-.
- Chisels I. 2019. The history and origins of the indigenous Libyans. Tawalt.com (Arabic).
- Genome. 2023. Genetic ancestry. https://www.genome.gov
- Hammer, Q. 2006. A genetic view of identity. Republican Idea website. www.alfikra.org (Arabic).
- Hanin, R. A. Hanin.1963. Economic development and internal migration in the Sudan. Sudan Notes and Records 44: 100119-.
- Hanna, D. 2017. Genetic analysis proves that Arabs are not completely Arabs. National Geographic Project "Genographic Project". Arabuc.rt.com (Arabic).
- Hisham,Y., Peter A. U. etal.2008. Y-chromosome variation among Sudanese: restricted gene flow, concordance with language, geography, and history. American journal of physical anthropology 137(3):316323-
- Hussein, M. 2015. Genetics says: In Sudan, the origin of humanity... 90% of Sudanese women carry genes connected to a hundred thousand years ago. Al-Nilin website. www.alnilin.com (Arabic).
- Hussein. A. 2012. Self-awareness and establishing identity. Amazon. Com (Arabic).
- Idris A. 2005. Conflict and politics of identity in Sudan. Springer. Books.google.com

- John SH Tay, N Saha.1988. Genetic heterogeneity among the Negroid and Arab tribes of the Sudan. American journal of physical anthropology 76 (2): 211215-.
- Lawinsider. 2023. Definition of racial group. https://www.lawinsider.com.dicti
- Mediatekstore.com. 2023. Genetics in East African Populations: The Nile-Saharan Component in the Genetic Landscape. african.mediatekstore.com (Arabic).
- NCI, National Cancer Institute.2023. The definition of ethnic group. U.S. Department of health and human services, National Institute of Health, National Cancer Institute, USA. gov
- Salem A., Halim S.,Muhalab A., et al. 2014. Genotype and allele frequencies of MDR-1 gene polymorphism in Jordanian and Sudanese populations. Am J Med Stud 2 (1):1923-.
- The true Sudan of Kush, 2015 www.kush.com
- Wikipedia. 2019. The origin of the population of Sudan. www.wikipedia.org (Arabic).
- Wikipedia. 2023. Heredity. Wikipedia.org
- Wikipedia. May 2020. History of Sudan. www.wikipedia.org (Arabic).

2

Some features of the administration and Education systems

and immigration in Sudan

2

Some features of the administration and Education systems

and immigration in Sudan

Sudan was subject to Turkish and Anglo-Egyptian rule which brought modern administration and education to the country. National governments also worked to develop and promote these two systems. Both the efforts of colonialism and nationalism have determined their features that have direct relations with immigration.

1. The features of the administration system in Sudan

The administrative system of the Funj State before 1821 AD, and the administrative bodies that contributed to its organization proved to be credited with the survival of the Funj State over these years. The Funj enjoyed a rational judicial system that knew even the current litigation levels (Hassan, 2004).

Sudan had new forms of administrative divisions during the Turkish-Egyptian era from 1821-1885 (Figure 1). The administrative system began with the Headquarters of the Hakimdaria took responsibility for all the governorates. The position of Hakimdar was abolished in 1834 AD, the centralization system was implemented where the provinces were subordinated to the Khedive directly in Cairo. Decentralization was restored again when it was difficult to implement centralization. During the reign of Khedive Said, centralization was restored again and when its implementation failed, they were forced to return to decentralization during the reign of Khedive Ismail in 1871.

During the period of Turkish-Egyptian rule, Sudan witnessed eight administrative amendments, and each experience was followed by a re-

turn to the application of the general Hakimdaria. This system proved successful in assimilating the people of Sudan into one region affiliated with the Council of Supervisors (Cabinet of Ministers) in Cairo. At the end of the Turkish-Egyptian rule, the number of governorates reached thirteen. They were Kordofan, Fashoda, Dongola, Berber, Sennar, Khartoum, Fazughli, Taka, Darfur, Equatoria, Bahr el Ghazal, the Upper Regions, and the White Nile.

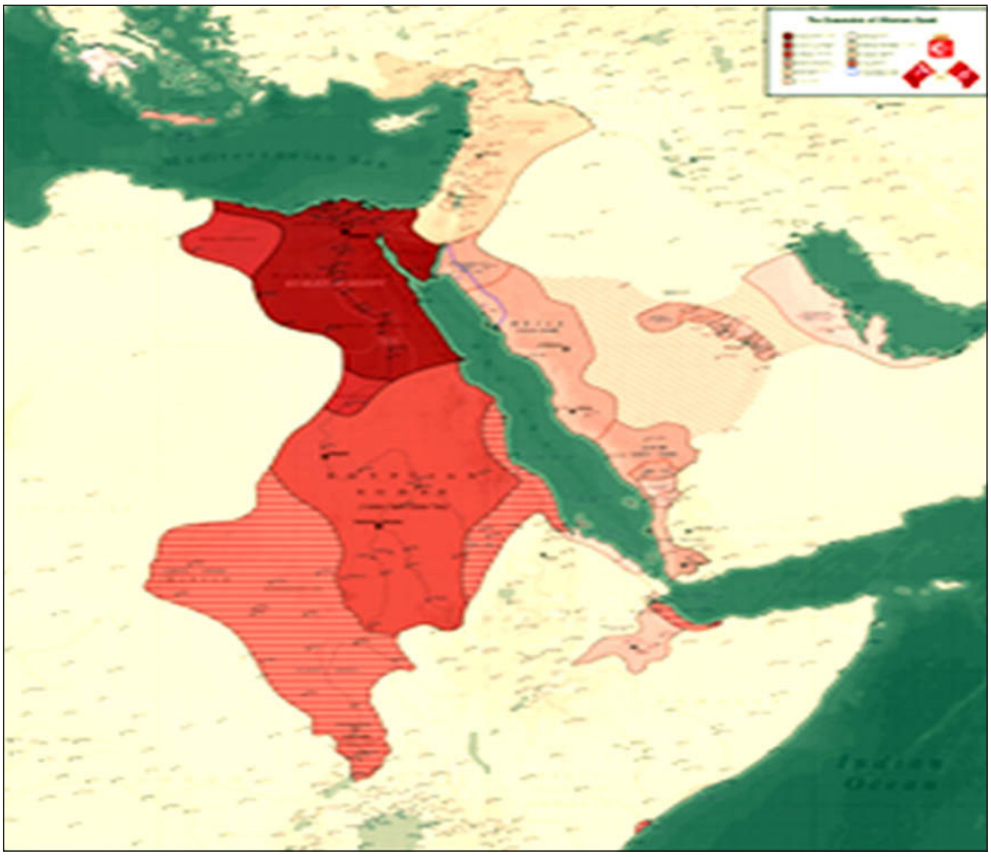

Figure 1: The Turco-Egyptian Sudan

Source: https://www.google.com/url?sa=i&url=https%3A%2F%2Fen.wikipedia.org

Sudan was divided into south and north "Bahri", each of which had a general director affiliating directly to Cairo. This system was abolished in 1874 and replaced by the Hakimdaria, which was also abolished and Sudan was divided in 1882 AD into several regions. They included

the Central Sudan region, the Equatoria region, the Western Sudan region, and the Taka region and its annexes. This system was canceled due to the outbreak of the Mahdist revolution in 1881 AD and the return to the Hakimdaria.

The Mahadism state from 1881-1885 (Figure 2) Implemented a central administrative system headed by Imam Mahdi and then Caliph Abdullah al-Taayshi. A director was appointed for each governorate, who was called a worker, with assistants and some senior tribesmen in managing the affairs of the administration. Sixteen governorates "Amala" were formed including Bahr al-Ghazal, Geziera, Bahrain "the two Niles", Kordofan, Darfur, Berber, Shilluk, Dinka, Dongola, Jebel Idris, Western White Nile, Eastern Baria, Eastern Greater Nile, Bahr al-Jabal, Kassala, and Tokar.

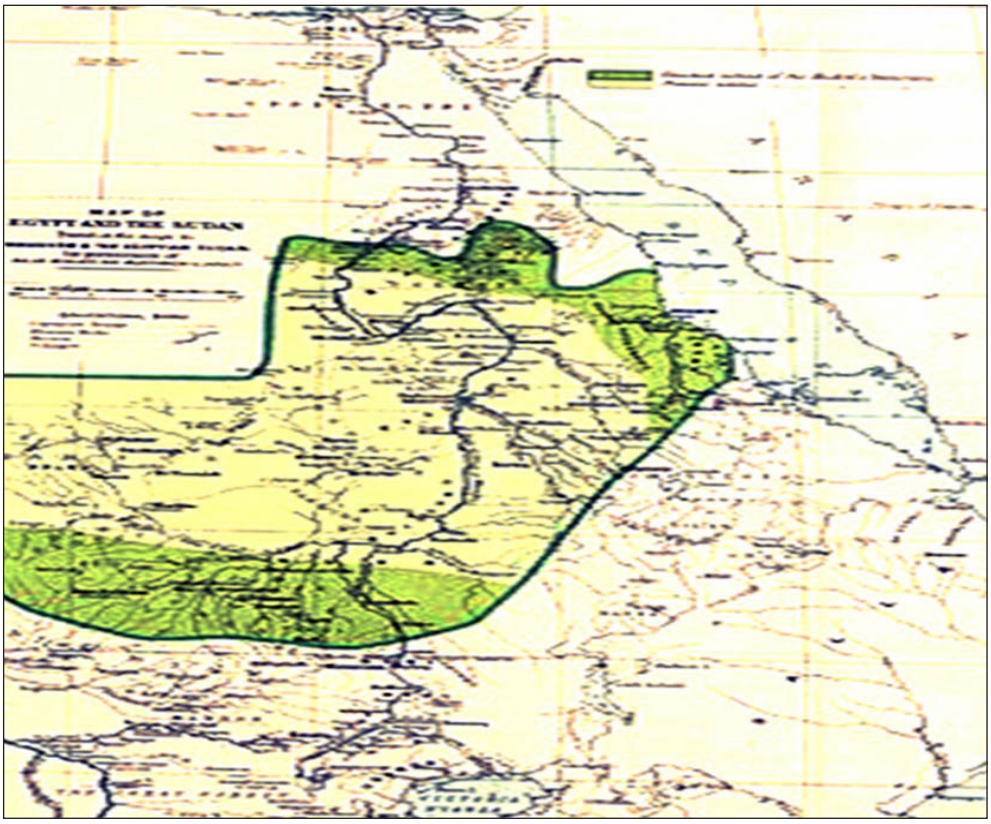

Figure 2: The Mahadism State 1881-1885

Source: https://www.google.com/url?sa=i&url=https%3A%2F%2Fen.wikipedia.org

In 1899 AD, the Anglo-Egyptian (Figure 3) rule faced two complex administrative problems, the first of which concerned northern Sudan and the second of Sudan south of latitude 10 degrees north. In the north, the administrative problem was an urgent issue, while the remote and heterogeneous tribes in the south did not pose a political threat to the new government. This is due to the Anglo-Egyptian's awareness of the fact that the process of reuniting these tribes administratively would cost them a heavy financial burden on the government, and could be devastating in the first years of their rule in Sudan. Therefore, the process of reunifying the South continued for decades, which led to delaying the implementation of many constructive administrative patterns in South Sudan. Due to the existence of a well-known administrative basis in northern Sudan, as it is part of the civilized Islamic world, and it did not lose the traditions and techniques of Western administration that the Turks introduced during their rule of Sudan, the Anglo-Egyptian built their administrative system on it (Anderson, 1963).

The South Sudan problem arose slowly during the first decade of the Anglo-Egyptian occupation of Sudan. The Anglo-Egyptian rule paved the way to the south first by cleaning the swamps of the rivers of Bahr al-Jabal and Bahr al-Ghazal. This was followed by securing control of the upper Nile Valley for the British and Egyptians against interference by other European powers through administrators and military forces. In 1898, Britain succeeded in expelling the French from the Upper Nile, and until 1906 it was able to exclude the Congo Free State, the third competitor to control South Sudan. Informal negotiations took place between the British Foreign Office and a representative of Leopold II, King of Belgium and Ruler of the Congo Free State, in the period 1902-1906. Both sides had legal and moral claims over the Upper Nile which received armed support from the general forces and Egyptian and Sudanese forces (Collins et al. 1961).

The Anglo-Egyptian rule established six governorates including Khartoum, Sennar, Dongola, Berber, Kassala, and Fashoda whose name was changed to Upper Nile in 1904, and Halfa and Suakin, which were

not subject to Mahadism rule. Following the conquests that took place afterward, new governorates were created including Darfur, Kordofan, and the Nuba Mountains when they were separated from the Kordofan governorates, and then the Funj governorate in 1924 AD.

As a result of the global crisis, many governorates were joined together, becoming nine governorates. The Anglo-Egyptian established the Northern Directorate in 1935 AD from three governorates of Halfa, Dongola, and Berber. In 1936 AD, the Equatoria governorate was established from the two governorates of Bahr el Ghazal and Manqala. Kordofan was formed from the governorates of Kordofan and the Nuba Mountains. In 1937 AD, the White Nile governorate became a branch of the Blue Nile governorate, then it was merged into one governorate called the Gezira governorate, whose name was changed to the Blue Nile governorate in 1942 AD. Khartoum, Kassala, Upper Nile, and Darfur governorates remained in their status quo.

In 1948 AD, the Bahr el Ghazal governorate was separated from the Equatoria governorate. This administrative division continued until the beginning of the national rule and was maintained with the reduction of the Khartoum governorate to a province-level headed by a deputy director, as it was before. In the early 1950s, a new system of government began in Sudan, as the Sudan Self-Government and Self-Determination Agreement was signed on February 12, 1953 (Saeed, 2016).

There are features of the mechanism of cooperation that allowed Anglo-Egyptian colonial officials to include tribal sheiks and educated Sudanese in the structure of the colonial government, and for religious leaders and merchants to function in harmony with the goals of the government. There was also a gradual shift from the cooperation mechanism to the political party mechanism. Colonialism supported the Umma Party and the Unionist Patriots to conduct their election campaigns in 1953 and paved the way for post-independence political goals. The cooperative relationship between the colonizers and the colonized in the case of Anglo-Egyptian Sudan reflects a unique case in the history of Anglo-Egyptian colonialism in Africa and the African nationalists' quest to exit colonialism (Abushouk, 2010).

The Anglo-Egyptian rule introduced native courts in Sudan as part of a policy of indirect rule. They have continued to this day, working as agencies for the central governments to control the rural population. In the last three decades, there have been attempts at reform, all of which failed to produce sufficient results in the affairs of the rural population. The 1973 law abolished the native courts and the native administration system and established a system of people's courts and people's councils as an alternative to them. This was considered an indicator of the socialist orientation of the government at that time. The second reform, in 1976, achieved few agreements to deal with the problems that resulted from the 1973 law. The 1977 law facilitated the return of many tribal chiefs to the reformed local popular courts. This was again linked to the change in the political orientation of the government and so its pattern of development became circular in nature.

The history of native courts in Sudan shows not only the nature of political relations between the center and the periphery but also explains why any political government would want to build these relations in a different way (Abdul-Jalil, 1985). There have been practical and realistic attempts by various governments in Sudan to renew or return the native administration system. This was done by following two paths, the first of which was the slow and gradual reforms that emerged from the regional governments before 1986 AD, and the second was the comprehensive strategies adopted by the central government in this regard (El Hussein, 1989).

The local demand for revolutionary change was met with the implementation of the popular local government system of 1971, oriented towards democracy and socialism. In 1973 AD, the revolutionary evasions led to the loss of much of its strength, as it was replaced by another law in 1981 AD This was not only an administrative change, but it was a reflection of the mood of the national government and the jury's rule of a decade of local popular government system. The new law avoided imposed directives and regulations, characterized by flexibility in interpretation, and laid the foundation for an administration with a reputation that requires determination to exploit it (Norris, 1983).

The Darfur administrative referendum, the deliberations of the national dialogue on the administrative situation in the country, and the results of the national conference to evaluate federal governance once again brought to mind the administrative transformations and administrative division of Sudan since the Turkish rule, the Anglo-Egyptian rule, and the formation of Sudan's administrative map for economic, political and security reasons (Figure 3).

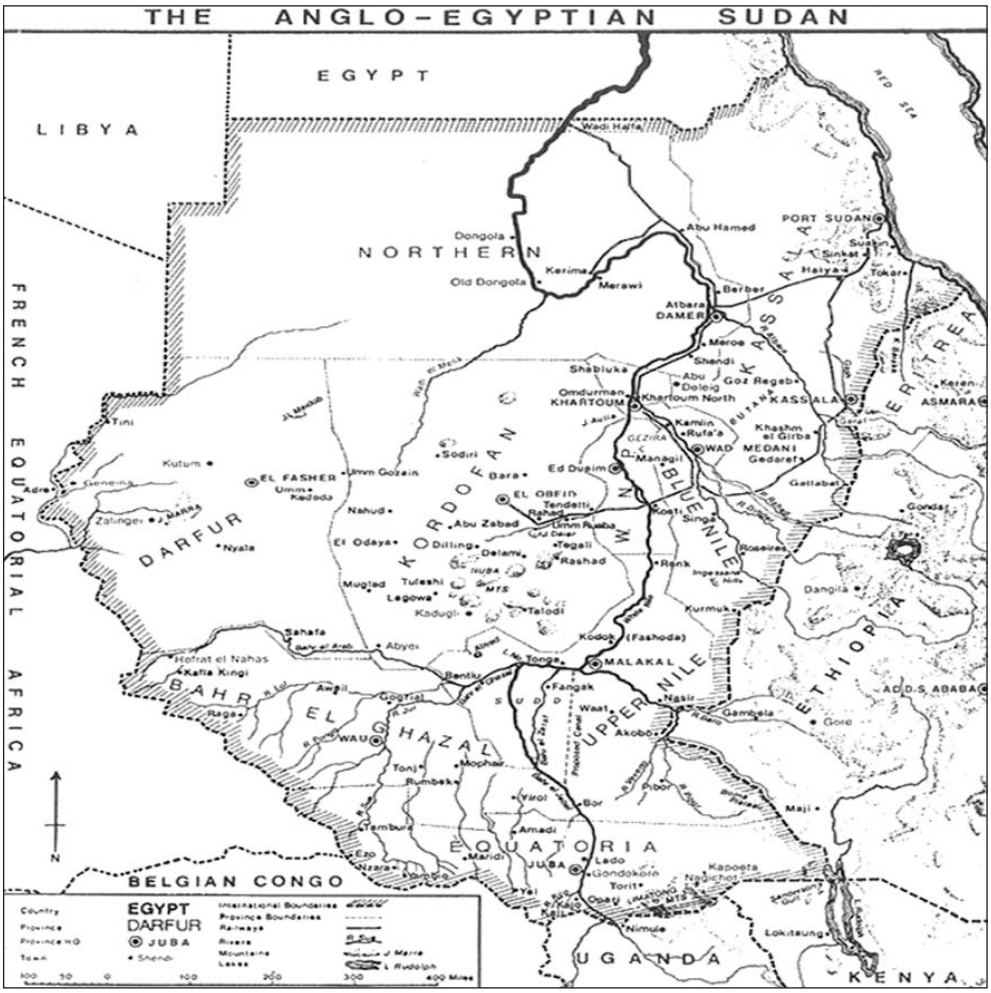

Figure 3: The Anglo-Egyptian Sudan

Source:https://www.google.com/url?sa=i&url=https%3A%2F%2Foxfordre.com

The scarcity of human and financial resources in Sudan, the drive to maintain tight political control over the States' members, and the increase in their numbers are considered obstacles to dealing with their development problems well. Modern regional planning is directed toward identifying opportunities, mobilizing resources, and development at the local and regional levels. In addition to the challenges created by the administrative decentralization system, Sudan differs not only in the extremism of its area, but also in its ethnic composition, population density, culture, climate, and distribution of its natural resources. Both the breadth and heterogeneity of Sudan may provide strong arguments in favor of some aspect of decentralized governance capable of shaping, implementing, and responding to the aspirations of different groups of its population.

Successive governments responded to this disparity and the political conditions they faced by implementing administrative structures and local and regional governments (Guimaraes, 1997). There is evidence that the apparent local conflicts overlap with the purposes and interests of governments, opposition groups, armed movements, and military organizations at the large sub-regional level of which Sudan is a part. Therefore, instead of using the country as the unit of analysis, it is more useful to study the entire region where conflicts occur (Grawert, 2008).

Economic growth and social modernization certainly depend in part on the ability of Third World governments to diffuse responsibility for development planning and management, expand participation in economic activities, and promote new centers of innovation in society. The excessive concentration of administrative authority hinders development, leads to waste and corruption, delays movement, and creates administrative practices that lack logic and efficiency, which is a cost that Third World countries cannot meet. To confirm this, the import system or the central supply system in Sudan was studied in the late fifties through the import of shoes that are manufactured in El Fasher and sent a distance of four hundred miles by railway, where all

the import of shoes is concentrated. When El Fasher wants shoes for school children and government employees, it must send a request to Khartoum. This also applies to school desks and equipment in the city of Juba, as they come by order from Khartoum, which is nine hundred miles away and is linked to an inefficient river transport system, even though they are made of wood that comes mainly from the forests of the south (Rondilli, 1981).

Bedouin groups in Sudan faced complex marginalization that has been accelerated by land laws and unguided state development plans. This situation was further exacerbated by an administrative situation that resulted from abandoning the traditional local mechanisms that were used to govern the relationship between individuals and groups in rural areas and regulate their exploitation of available natural resources.

Those who have studied these Bedouin groups since the 1950s and the following years have recognized three types of nomadic organization systems: pastoral nomadism. There is the regular movement of people and the entire family in search of pasture and water. Pastures are mostly not connected and are linked to communication corridors (paths). Each group has traditional and exclusive rights to reside and benefit from the territory. These rights are called the group's homeland, where the capital is kept primarily in the form of animals. Unfortunately, it appears that this limit has been reduced due to traditional rain-fed agriculture, favored by the development strategies adopted by the state.

There is a system of semi-nomadism or agricultural nomadism in which part of the family leaves the homeland while the rest move with the animals in search of good pasture and water. The rest are engaged in various crafts, most of which are agriculture. There is transhumance, a form of nomadism practiced by sedentary farmers where their main economic activity and most of their time is focused on agriculture. It is difficult to distinguish these groups as separate entities. The most common activity is agricultural nomadism, which is mostly practiced by all these groups.

The rapidly amended administrative systems have created interrelated problems for nomads in Sudan since they did not consider the nature of their movements and failed to accommodate them into proposed development policies.

1. The features of the education system in Sudan

Education in Muslim society, as in other societies, is considered a social system that affects and is affected by other social systems. Islam has provided an integrated societal system that regulates the behavior of individuals and groups. Education is considered secondary to politics. The degree of religious homogeneity in Muslim society is also of great importance. The disparity in the proportion of the Muslim population in the country may create many complications that result in different priorities for education. Schools can strengthen or change traditional values, but often political and economic considerations are even more important than religious or professional pressures.

The educational system in Sudan passed through multiple stages, each of which had its own framing influence. These stages were consistent with the major political changes in the country, leading to the use of education as a medium for distributing political thought in terms of changing goals and policies. Since independence, governments have worked to change educational goals to suit their political goals since 1958-1964, when the first military coup took place (Abdel Gadir, 2015).

Politics greatly influences education. The development of the national curriculum wears the uniform of the educational system, as it places the development of the curriculum under the absolute authority of the government. The British administration in Sudan (1899-1956), working to control political change, attempted to create an education system that was essentially foreign to traditional Islam, as the existence of regular schools would become disastrous. The problems that educated people, administrators, or others saw as educational or religious problems during the colonial rule, were in reality political and economic (Sanderson, 1975).

There is an assumption that the processes of flow and circulation of world culture originate in the West. On the other hand, Islamic culture is often seen as static, and thus its flow and circulation are invisible within the global system. In a study on modernity in the village of Wad Al-Abbas - Sinnar region in Sudan - it was found that "foreign" external influences are considered Islamic as well as "Western," and Islamic culture blurs the distinction between foreign and local. The villagers in Wad al-Abbas believed that the fundamentalist forms of Islam that prevailed in the global Islamic awakening were not traditional, as they represented a modern, universal identity for the Muslim identity (Bernal, 1997).

There was an argument that the spread of higher education and economic liberalization have weakened state control over the economy and served to replace the previous institutional system of privileges that had a particularly phased, decentralized structure. In theory, the expansion of higher education and economic liberalization should allow the government to expand patronage networks. There is a possibility that they have worked to reduce the ability of the government and the private sector to exercise power and build predictive capabilities from them (Mann, 2014). Social networking is also considered one of the most important means of communication, especially in student communities. It has become used in guidance to improve teaching and learning although its use is limited in Sudan (Hassan et al. 2018).

Development and reform in the education sector for many people are always linked to the efforts of the government as it works to meet education's needs for national development. The development of basic and technical education is considered the heart of educational development and reform, with the aim of providing quality education to develop human resources to meet the requirements of the social, economic, and political development of the country (Suliman et al. 2007). Recent decades have witnessed great interest among Sudanese in pharmaceutical education. This has resulted in the establishment of a large number of pharmaceutical schools and the trend towards con-

structing more (Mohamed, 2011). Many aspects of change in women's work and health also emerged in rural areas in Sudan. The health status of women has improved due to their access to education and health services. Racial friction and the decline in females in one region led to results that were opposite to what was found in the other region, in which health education contributed to lowering the rates.

The structure of agricultural development also resulted in changes in women's contributions to agriculture and rates of polygamy, which had an impact on birth rates (Gruenbaum, 1991). The concentration of education and health services in the urban sector is considered the main reason for the great gap in the human poverty index between rural and urban areas in Sudan. The difference between males and females in human poverty tends to decrease due to the small difference in life expectancy values (Jomah, 2015).

The unity between production and social reproduction constantly faces the phenomenon of dissolution. Education and socialization of children are considered the practical key to social reproduction. The content and mechanism of acceptance and use of children's environmental knowledge has changed dramatically in the village of Hawa in Sudan, which is embedded within state-supported agricultural development projects. Children contribute greatly to all environmental work related to providing or producing livelihood for the family. The socio-economic processes of commoditization embedded in the agricultural enterprise increased the demand for child labor and began to close the existing unity between work and play, making the home no longer a suitable shelter for social reproduction and reducing the skill of the agricultural population. These changes, coupled with fixed land relations, are likely to lead to a disjuncture between what children learn and what they will do as teenagers or boys (Karz, 1991).

Islamic law is considered a translation of the religious teachings expressed in the Qur'an and Sunnah. As such, it is considered a component of non-formal education in Sudan and has a significant impact on aspects of life, especially since it is regularly applied in family law.

The Sunnah differed depending on the time and place of application. This can be clarified by comparing two women's groups, the Sudan Women's Union and the Republican Sisters, to express the factors that shaped their approach and thinking in their search for gender justice without losing religious legitimacy. The Republican Sisters have demonstrated that a re-understanding or interpretation of Islamic teachings can only be defended by the religious group and not by secular groups and that there is a significant continuing influence of the political climate on laws and the ways in which women react to their oppression in the name of religion (Abdel Halim, 2009).

2. The features of immigration in Sudan

Sudan is considered one of the most sparsely populated countries in the world, with an average density of 4 people per square kilometer. The dispersion of the population is characterized by its unbalanced distribution, which is mainly attributed to the distribution of the river system network and climatic conditions over its vast area. Sudan is also dry in the north, with the exception of the densely populated Nile Valley, while the south is characterized by humidity and swamps elsewhere. Between these two extremes, there are vast stretches of uninhabited land. There is a clay plain with a high population density, and other pockets with a high population density located in the narrow strip along the Nile and the Geziera, where the density reaches 87 people per square kilometer, next to which there are vast uninhabited areas (Hanin, 1963).

Sudan suffers from many environmental problems, including neglect of tropical forests, desertification, and decreased biodiversity. While rapid population growth is an important factor in this environmental degradation, there is often no empirical evidence of it. Understanding the impacts of population on the environment requires careful consideration of the full range of factors responsible for environmental degradation and how they intersect with demographic factors. The nature of this relationship is strongly determined by land use patterns and agricultural policies adopted by governments (Bilborrow et al. 1990). Su-

dan has historically suffered from devastating famines that profoundly reshaped its society, as a result of exploitations that diverted various resources to a small group of beneficiaries from the local elite and British imperial agencies that sought to control the Sudanese state upon its independence (Serels, 2013).

Unbalanced regional development is considered the main cause of internal migration in Sudan, especially to urban areas. The population of Greater Khartoum has increased at different periods, with most of this growth attributed to migration from the countryside and other urban areas, with most migrants heading towards it, along with migrants from neighboring countries. The population of Khartoum reached 3.3 million people in 1990, representing an increase of 154% in less than a decade.

Influxes of migrants have contributed to increasing poverty rates in Khartoum State (Bakhit et al. 1994). They enhanced rapid expansion of urban housing, the appearance of hundreds of cities, in addition to informal housing around the cities, and problems of unemployment and deterioration of services (Elhadary, 2002). There are more than a hundred slum areas forming a ring surrounding the three cities, where more than half of the population of Khartoum State lives and lacks the basic necessities of life (El-Bushra et al. 1995). On the outskirts of the city of Omdurman, water is characterized by low quality and microbial contamination, with high rates of diarrheal disease, especially in the rainy season in Khartoum Governorate (Musa et al. 1999).

The acceptance of the division between the “rural” and “urban” sectors in African societies and adopting a sectoral approach to development issues allows for the dominance and continuity of the concept of dualism in all fields. When differentiating in the scale used between “urban centers,” “small urban centers,” and “rural areas,” the possibility of accepting the idea of continuity between the rural and urban sectors becomes clear. Societies in transition often suffer from a multiplicity of sources of discord whose form and content are ambiguous and which, from a historical standpoint, represent a dramatic presence of continuity and change (Ahmed et al. 1979).

In western Sudan, there are three types of population movement based on continuity and change. There are movements that occurred in the past and ended in the present, and there are movements that continued from the past to the present, such as seasonal migrations of Bedouins and religious pilgrimages, and there is the movement that developed during the current century (El-Dawi, 1975). Famine-induced migrations occurred from rural communities in North Darfur to the capital, El Fasher. Its timing turned out to be a past experience used to align with economic opportunities in provincial capitals (Pyle, 1992).

Some villages in Kordofan and Darfur are characterized by being less permanent compared to those on the Nile in the Northern Governorate. Many administrative units, mayors, and sheikhdoms are composed of a mixture of sedentary people and nomads. The degree of social difference is more evident in the three southern governorates than in the six northern governorates. This is confirmed by the large number of languages and tribes due to the prevalence of a self-sufficient economy there, as 27% of the population lives in villages or in huts scattered in the forests, alongside nomadism, which differs from that found in the north (Hanin, 1963). This self-sufficiency economy is at risk of climate change impacts such as desertification.

The example taken from the Burush area in North Darfur shows that migration is a survival strategy in areas affected by desertification, where rural-rural migration plays a greater role than rural-urban migration among the Berti group in North Darfur. Their frequent movements across their region are part of their traditional economic pattern to cope with drought and the apparent irregularity of rainfall (Ibrahim et al. 1991). In addition to this, there is recent migration from neighboring countries, an example of which is the migration of Ethiopian women to meet the increasing demand for them from a segment of Sudanese society to work as domestic maids. They are characterized by a low level of education and that they are mostly illegal immigrants (Jamie, 2013).

The flow of migration from low-productivity and low-income areas to their opposite areas leads to the placement of more productive and

efficient human resources and increases the flow of migrants seeking work in cities, the continuous supply of labor, and the stimulation of industry (Oberai, 1977). An analysis of the diverse participation, lifestyles, and social experiences of migrant workers for wage work in some factories in the Khartoum Bahri industrial area showed that most of them came from northern and western Sudan to settle permanently in the capital. It also became clear that they were proletariat in their situation and aspirations. As for the building workers, they belong to the Nuer tribe and have a circular migration between the city and the countryside. The differences between the two groups are related to the unbalanced penetration of capitalist relations in the various regions of Sudan (Kamier, 1988).

The transitional migration of the people of the village of Wad al-Abbas in northern Sudan created a new understanding of what it means to be Muslim. The village of Wad Al-Abbas was introduced into the global economy in the mid-1970s and 1980s. This was done by Saudi Arabia which made efforts at the national level to pressure President Numeiri to enact Islamic Sharia laws to get rid of opposition groups such as the Muslim Brotherhood while working to attract Sudanese citizens to it as migrant workers. Here, the national economy, the identity crisis, and migrant labor from Sudanese villages to Saudi Arabia became catalysts for change. This was an encirclement of new beliefs that enabled a movement away from local identities towards conformity with a broad, universal set of beliefs and practices of the villagers of Wad Abbas (Bernal, 1999).

Rural-to-urban migration in Sudan does not leave rural areas without side effects, not only in attracting the most dynamic and vibrant members of society but it may also drive away investment capital and other financial resources that could have benefited from the countryside. But migration can likewise benefit the movement from areas of low productivity and income to areas with high rates of income, which leads to a more productive and efficient placement of human resources. The influx of migrants seeking work in cities not only increases

labor supply but can stimulate industry (Oberai, 1977). The effects of net rural-to-urban migration can be beneficial or determinant for development provided that high rates of migration are capable of incorporating costs and benefits for individuals, different social classes, and society as a whole. However rapid growth in job seeker rates may lead to increased urban unemployment.

Population displacement due to armed conflicts, regional crises, or natural disasters leads to the emergence of many human settlements that affect the local environment. The particular dynamism of such semi-permanent settlements, which includes both structural changes and their broad impacts on surrounding areas, requires predictive adaptive capabilities. Residents of marginal areas usually migrate to irrigated projects in central Sudan and to mechanized agriculture areas in eastern Sudan. This may be due, in addition to what was mentioned earlier, to the unjust distribution of wealth, rapid population growth, capital accumulation in most large cities, the dangers of drought and desertification, and the state's biased development policy. These immigrants take up residence in "kanabi" areas near old villages in agricultural areas that lack many of the basics of life.

Wars and drought have depleted most of the sources of natural pastures whose area is estimated at about 110 million hectares, most of which are located in Kordofan and Darfur (Babiker, 2015). The Gedarief region suffered from extensive deforestation as a result of the expansion of mechanized agriculture in the late 1950s causing a dramatic increase in vegetation clearance (Sulieman, 2008). Such changes in the pattern of land use and land cover are considered important changes affecting ecosystems and trigger conflicts that initiate immigration.

Since the mid-1940s, land policies established by the colonial administration and subsequent national governments have aimed to marginalize the Bedouins. The Soil Conservation Commission report of 1944 recommended that since there is direct competition between nomadic herders with sedentary farmers for land, it is necessary for government

policies to consider farmers' rights a priority because the crops they produce have a greater return per unit area of land. The same policy was followed by national planners who supported the settlement of the Bedouins, who did not fully take into account the Bedouins. In the early sixties, investment in mechanized rain-fed agriculture developed at the expense of most of the lands on which Bedouin groups depend in most parts of the country.

This policy, in turn, affected the movement of Bedouin groups and created severe conflicts between Bedouins, owners of agricultural projects, and sedentary communities close to grazing areas. The situation was further aggravated by the outbreak of civil war, which denied the Bedouins the movement they were accustomed to towards the south to reach the pastures. The decline in productivity of Bedouin-related activities in recent years has forced the Bisharis and Amarr/Itmans to seek wage employment elsewhere, especially as stevedores in Port Sudan. This has increased alarmingly in recent years, although work in Port Sudan has attracted them since its establishment in 1909, hindering the ability of the tribe of Biga lineages to cope with crises in the long term (Pantuliano, 2002).

The drought in the Sahel region during the mid-1980s influenced the Hawawir Bedouin tribe in northern Sudan. This experience demonstrates the connection between the displaced, the natural movement of the population, forced migration, and opportunities for return. In addition to that, is the success of new ways of living based on traditional rights, established local institutions, and external resources. Some of the Hawir tribe returned to their homeland while others did not, and in both cases, the process of displacement and return affects belonging and identity (Haug 2002 Haug, 2002).

The progress that has occurred in the development of the nomadic sector in Sudan can be explained by reference to planning strategies. This was done through three types of experiences and information that dominated the scene in the past sixty years. These three main experiences influenced rural production systems in which Bedouins

played an important role. The experience of Bedouin sedentarization prevailed in the late fifties and sixties, and it considered the Bedouin living system simple and backward and encouraged Bedouins to settle and integrate into the settled society (Casciarri, et al. 2009).

The level of economic development in Sudan is considered a catalyst for migration. Therefore, before beginning to track the effects of economic development on internal migration, it is necessary to review the social and economic conditions in rural communities in Sudan. In addition to the natural factors responsible for the recent famine disasters in western Sudan, the fragile economic structure of the population groups exposed to famine was also affected (Ibrahim, 1988). When reviewing the development programs that affected Sudan's rural population in the period between independence and 1994 AD, the failure of farmers' efforts becomes clear to a large extent (Grawert, 2016). An analysis of the lives of farmers in western Sudan shows that economic development does not have an equal impact on all societies. A Bedouin man from Kordofan or Darfur may not react to technological changes in the same way as a settled farmer in the northern state (Grawert, 2016).

Environmental degradation in areas where livelihood and food security depend on a high degree of natural resources leads to armed conflicts to control them, especially if they are scarce, and also leads to renewed waves of migration (Hagenlocher, 2012). The ongoing conflict in Sudan began since independence, where the way out was systematic marginalization and exclusion of broad non-Northern groups from access to state power (El-Battahani, 2013). One of the results of this was the emergence of migration waves that included displaced persons, refugees, and economic migrants. It was estimated that 17% of Sudan's population in 2004 were displaced. The signing of the peace agreement in 2005 AD was followed by the return of a small number of displaced people from South Sudan, and despite its secession in 2011 AD, some of them remained in the north, where their fate was not determined (Assal, 2011).

The rate of change in the ratio of refugees from rural to urban is greater in Sudan than elsewhere in Africa. Recently, a rural-rural refugee pattern prevailed. There has been an increase in asylum from urban to urban and in large numbers from rural to urban (Rogge, 1986). The significant increase in the population of IDP camps in North Darfur between June 2002 and May 2008, from approximately 1,200 people to approximately 50,000 residents, was accompanied by a significant decrease in the area covered by shrubs by 3%. and by small trees by 68%. There was also a noticeable expansion in short-term agriculture, especially in the fertile soil of the valleys. Major degradation was observed in the northeastern and eastern parts of the camp (Hagenlocher et al. 2012).

Tribal or ethnopolitical divisions could be blamed for the initiation of small-scale conflicts in Sudan that motivate people to migrate. However, the matter is not limited to that, as there are many factors that play a role behind these conflicts, the most prominent of which is the combination of resource scarcity and a governance crisis. This was clearly evident in some regions, such as the Kordofan region, where natural resources have weak bases that in some cases helped create conflict. The coercive or exhaustive method of limiting the government's efforts with regard to natural resources also reduced the value of the governance of these resources. In the past, conflict between herders and farmers was managed with relative success through customs and traditions associated with land ownership. Conditions have changed as a result of the large herds, the scarcity of pasture and water, and the presence of weapons among the shepherds. Clientelist politics, weak resource management, development policies, and state institutions have also encouraged ethnic polarization and social division (Siddig et al. 2007).

Refugees are considered human masses searching for security and support, and they constitute a diverse group of people, often politically active. The case of Sudanese refugees who were forced into exile due to internal conflict casts shadows on these characteristics of refugees. Sudanese belong to different ethnic groups that have become highly po-

litical as a result of the conflict. The politicization of Sudanese identities in exile is due to competition for resources and memories of being victims, in addition to the prevailing conditions in their original “places” and the request for political asylum. The relationship between the Sudanese Madi and Kuku ethnicities migrating to the Ajumani district in Uganda, which is adjacent to Sudan, took on a violent nature due to the conflict over resources, and a similar conflict also occurred between the Nuer and the Dinka in Cairo (Moro, 2004).

The migration of Sudanese to the United States and Canada is considered the most recent from the Third World, where before that they were migrating to Egypt, the Arab Gulf states, Libya, and the Emirates. There was limited and temporary migration from Sudan to the New World in search of higher education, which was replaced by larger migrations stemming from political instability, economic hardship, and little perceived option for migration (Abusharaf, 1997). The Australian government has exerted great efforts to educate and settle young Sudanese migrants and their parents (Major et al. 2013).

In Sudan, the migrants, irregular workers, cross-border migrants, and refugees have legal status, although Sudanese laws have not played a decisive role or entered into agreements with Sudan’s neighbors in combating illegal immigration. This exists at a time when Sudan receives huge numbers of them and deports thousands of them annually (Babiker, 2011). Illegal immigration across the Sudanese-Ethiopian border is facilitated by smugglers and their contacts with the local communities spread along this border, in addition to bribery of the border guards and their ethnic, religious, and economic connections along the borderlands in the profit-making capitalist framework. This challenges the view reflected in the public media that independent criminal organizations are organizing this migration (Ayalew et al. 2018).

References:

- Abdel Gadir, Y.M.H.2015. Politics of education: education in Sudan during different ruling systems. Ahfad Journal 32 (1): 3-14.

- Abdel Halim, A.M. 2009. Women's organizations seeking gender justice in the Sudan 1964-1985. Review of African political economy 36 (121):389-407.

- Abdul-Jalil, M.A.1985. From native courts to people's local courts: The politics of judicial administration in Sudan. Verfassung und Recht in Ubersee/ Law and politics in Africa, Asia and Latin America, 139-152.

- Abusharaf, R.M. 1997. Sudanese migration to the new world: Socio-economic characteristics. International migration 35 (4): 513-536.

- Abushouk, A.I.2010. The Anglo-Egyptian Sudan: From collaboration mechanism to party politics, 1898-1956. Arabic

- Ahmed, A.G., Abdel Rahman, M. 1979. Small urban centers: Vanguards of exploitation, two cases from Sudan. Africa 49 (3): 258-171.

- Anderson, L. 1963. Educational development and administrative control in the Nuba Mountains region of the Sudan. Journal of African History 4 (2):233-247.

- Assal, M. 2011. Conflict- Induced migration in Sudan and post-referendum challenges. Technical report, CARIM Analytic and Synthetic Notes, 2011/75, Migration Policy Center, CARIM-South

- Ayalew, T., Adugna, F., Deshing, P. 2018. Migration to the Sudan. African human mobility 4 (3): 13 kar.2018. Social embedment of human smuggling in East Africa: Brokening Ethiopian 33-1358.

- Ayalew, T., Adugna, F., Deshingkar, P. 2018. The social embodiment of human smuggling in East Africa: Brokening Ethiopian migration to the Sudan. African human mobility 4 (3): 1333-1358.

- Babiker, I.A. 2015. Animal feed industry in Sudan, current status, problems and prospects. J Dairy Vet Anim Res 2 (3):0036.

- Babiker, M.A. 2011. Irregular migration in Sudan: A legal perspective. Technical report, migration policy center. CARIM Analytic and Synthetic Notes,2011/64.

- Bakhit, A.H., Johauna, A.M.1994. Mubrooka: A case study in the food system of a squatter settlement in Omdurman, Sudan. GeoJournal 34 (3): 263-268.

- Bernal, V.1997. Islam, transitional culture, and modernity in rural Sudan. Gendered encounters: challenging cultural boundaries and social hierarchies in Africa, 131-151.

- Bernal. V. 1999. Migration, modernity and Islam in rural Sudan. Middle East Report 29 (2; ISSU 211):26-28

- Bilborrow, R. E., Delargy, P.F.1990. Land use, migration, and natural resource deterioration: The experience of Guatemala and Sudan. Population and Development Review 16:125-147.

- Casciarri, B., Ahmed, A.G. 2009. Pastoralists under pressure in present-day Sudan: an introduction. Nomadic people 13 (1):10-22

- Collins, R., Herzog, R. 1961. Early British administration in the southern Sudan. The journal of African history 2 (1):119-135.

- EL- Dawi, T.A.A. 1975. Migration in Western Sudan. Sudan Notes and Records 56:160-175.

- El Hussein, A.M.1989. The revival of native administration in the Sudan: a pragmatic view. Public administration and development 9 (4): 437-446.

- El-Battahani, A. 2013. The post-secession state in Sudan: Building coalitions or deepening conflicts? Sudan Divided,25-44

- El-Bushra, S., Hijazi, N.B.1995. Two million squatters in Khartoum urban complex: The dilemma of Sudan's national capital. GeoJournal 35 (4): 505-514.

- Elhadary, Y. 2002. Human mobility in Sudan. Human mobility in a borderless world, 305-22

- Grawert, E. 2008. Cross-border dynamics of violent conflict: The case of Sudan and Chad. Journal of African and Asian Studies 43 (6):595-614.

- Grawert, E. 2016. Making living in rural Sudan. Springer

- Gruenbaum, E.1991. The Islamic movement, development, and health education: recent changes in the health of rural women in central Sudan. Social sciences and medicine 33 (6): 637-645.

- Guimaraes, J.P.1997. The new federal system in the Sudan: some main aspects and implications for planning. Eastern Africa social sciences research review 13 (1): 37.

- Hagenlocher, M., Lang, S., Tiede, D. 2012. Integrated assessment of the environmental impact of IDP camps in Sudan based on very high-resolution multi-temporal satellite imagery. Remote sensing of the environment 126:27-38.

- Hanin, R.A.1963. Economic development and internal migration in the Sudan. Sudan Notes and Records 44: 100-119.

- Hanin, R.A.1963. Economic development and internal migration in the Sudan. Sudan Notes and Records 44: 100-119.

- Hassan, Abdul Karim Al-Harith Ibrahim. 2004. Administrative organization in Sudan during the era of the Funj state. Unpublished master's thesis, University of Khartoum.khartoumspace.uofk.edu

- Hassan, M.I.S., Kommers, P. 2018. A review of the effect of social media on education in Sudan. Int. Jou. Of educational technology and learning 3 (1): 30-34.

- Haug, R. 2002. Forced migration,processes of return and livelihood construction among pastoralists in northern Sudan. Disasters 26 (1): 70-84.

- Ibrahim, F.N., Ruppert, H. 1991. The role of rural-rural migration as a survival strategy in the Sahelian zone of the Sudan. GeoJournal 25 (1):31-38.

- Ibrahim, F.N.1988. Causes of the famine among the rural population of the Sahelian zone of the Sudan. GeoJournal 17 (1): 133-141.

- Jamie, F.O. 2013. Gender and migration in Africa: Female Ethiopian migration in Post-2008Sudan. Journal of Politicsand Law 6 (1), 186.

- Jomah, J. A. S. 2015. Human poverty in Sudan: an empirical investigation. American Journal of Research Communication 3 (5): 54-79.

- Kamier, E.W.M. 1988. The political economy of labor migration in the Sudan: a comparative case study of migrant workers in an urban situation,57,127. Arbeiten aus dem series, Institut fur Afrika-KundeHamburg

- Karz, C. 1991. Sow what you know: the struggle for social reproduction in rural Sudan. Annals of the Association of American Geographers 81 (3): 488-514.

- Major, J., Wilkinson, J., Langat, K., Santoro, N. 2013. Sudanese young people of refugee background in rural and regional Australia: Social capital and education success. Australian and international journal of rural education 23 (3): 95-105.

- Mann, L. 2014. Wasta! The long-term implications of education expansion and economic liberalization on politics in Sudan. Review of African political economy 41 (142): 561-578.

- Mohamed, S.S. 2011. The current state of pharmacy education in the Sudan. American journal of pharmaceutical Education 75 (4) Article 65.

- Moro, L.N. 2004. Interethnic relations in exile: The politics of ethnicity among Sudanese refugees in Uganda and Egypt. Journal of Refugees Studies 17 (4): 420-436.

- Musa, H.A., Shears, P., Kafi, S., Elsabag, S.K. 1999. Water quality and public health in northern Sudan: a study of rural and peri-urban communities. Journal of Applied Microbiology 87 (5):676-682.

- Norris, M. 1983. Sudan: "Administrative versus political priorities" In Local government in the Third World; the experience of tropical Africa/ ed. By P. Mawhood. Pp. 49-73. Africabib.org

- Oberai, A.S. 1977. Migration, unemployment, and the urban labor market – A case study of Sudan. International Labor Review 115 (2),211.

- Oberai, A.S. 1977. Migration, unemployment, and the urbanlabor market: a case study of Sudan. International Labor Review 115 (2), 211

- Pantuliano, S. 2002. Sustaining livelihoods across the rural-urban divide. Pastoral land tenure series.IIED.researchgate.net.

- Pyle, A.S. 1992. The resilience of households to famine in El Fasher, Sudan, 1982-89. Disasters 16 (1):19-27.

- Rogge, J.R.1986. Urban refugees in Africa: some dimensions of Africa's refugee problems, with special reference to Sudan. Migration World magazine 14 (4): 7-13.

- Rondilli, D.A. 1981. Administrative decentralization and economic development: Sudan's experiment with devolution. The journal of modern African studies 19 (4): 595-624.

- Saeed, Muhammad Azraq. 2016. Administrative transformations and the administrative division of Sudan in its modern history. Sudan News Agency www.suna.net. Arabic.

- Sanderson, L. 1975. Education and administrative control in colonial Sudan and Northern Nigeria. African Affairs 74 (297):427-441.

- Serels, S.2013. Starvation and the State: Famine, slavery and power in Sudan, 1883-1956. Springer

- Siddig, F., A., El-Harizi, K., Prato, B. 2007. Managing conflict over natural resources in greater Kordofan: some recurrent patterns and governance implications. Ageconsearch.umn.edu

- Sulieman, H.M. 2008. Mapping and modeling of vegetation changes in the southern Gedarief region, Sudan, using remote sensing. https://nbn-resolving.org/urn:nbn:de:bsz:14-ds-1199964393472-79860.

- Suliman, A., Ramadan, R., Hamid, R. 2007. ICT for higher education in Sudan: Issues and perspectives. M managing worldwide operations and communications with information technology.

3

The Theoretical Bases of Sudanese Development Planning from 1898-1993

3

The Theoretical Bases of Sudanese Development

Planning from 1898-1993

Sudan is considered one of the largest countries in Africa and the Middle East and includes numerous physical geographical regions and different tribal and ethnic compositions. Since the colonial period and the subsequent national governments, Sudan has adopted many development plans that were based on theoretical foundations aimed at achieving socio-economic development, particularly agricultural development. This is because the agricultural sector supports about 80% of the population and represents the most important sector in the country's national income.

Development planners in Sudan have adopted many theoretical concepts and theories for development that have been included in various development plans. The concept of the "diffusion of innovation" was introduced into Sudanese development plans in the early sixties of the last century. This concept views the regions of the heart as being located in the form of a network hierarchy of spatial systems, sending impulses of innovation to the margins that dominate them (Friedman, 1972). This process occurs in three stages. In the first stage, the core regions impose a state of organized dependency on their margins by building institutions in the marginal regions that are controlled by the core region authorities. In the second stage, the self-reinforcing process takes control of the margin, which is exposed to six feedback effects resulting from the growth of the heart region. These effects include sovereignty effects, information effects, psychological effects, modernization effects, linkages effects, and production effects. In the third stage, the entry of the heart region into the margins will support

and expand the flow of information to the non-independent region "dependent" on the heart region, which will produce intolerable negative effects from the sovereignty of the heart region.

The possibility of exchanging information and the possibility of modernization will increase in any spatial system if the condition for a successful challenge to the control of the center region over its margins is met This will develop the natural spread of the existing core regions, the weakening of their hierarchical arrangement, the emergence of new core regions in the margin, and the gradual integration or overlapping of large parts of the margin into one or more core systems.

One of the concepts that has been used in Sudanese development thought and is related to the concept of the "diffusion of innovation" is the concept of growth pole strategy. The pole is defined as a point in the abstract economic space to which the "positive" central forces are attracted and at the same time, the "repulsive" central forces emerge from it. This happens through the areas of influence associated with the group of different activities that make up the pole, and the small centers form the basic structure upon which development plans are built (Funnel, 1976). The "pole" field will be created, at any given time, through a series of fields surrounding other poles that exist at different levels of development and interrelationships.

Achievement of the goals of formulating development policies in Third World countries needs to provide some conditions that distinguish the centers of growth poles (Appalaraju, et al., 1976). These conditions include, firstly, (1) the presence of production, distribution, and specific commercial activities that have achieved the level of even a little performance, and secondly (2) the development and building of direct and indirect links between the previous activities and groups of other activities included in a "mixture" of reciprocal mutual integrative exchange, and thirdly (3) the growth of the previous activities (1) at a good rate to propel the system of interconnected activities in (2), and fourthly (4) the continuous development of the system of activities and operations found in (1) to (3) through distinct spatial concentration that

is characterized by a degree of relative positive or confirmed centrality in the national space and in regional development, and fifthly (5) the growth and provision of infrastructure for sites included in (4) to justify external influences and added influences of grouping of those activities included from (1) to (3) for the purpose of achieving good emplacement and supporting urban infrastructure and facilities and the ability to focus activity in (4) to reach a performance level under (5) to include the socio-economic development of the surrounding areas and human settlements through trade operations, communication and other diffusion mechanisms for growth (Appalaraju, et al.1976).

Development planners in Sudan also adopted the model of cumulative causation, which believes that once development begins in a particular center for any reason, then the region will develop its driving force for growth through the process of cumulative causation. This growth momentum will expand through the interaction between the developing center and other parts of the country. Here we find that the movement and trade factor that lacks balancing effects has wash-out effectsthe reversed negative impact on deteriorating regions will delay their growth, and will also increase the economic gap between the regions. Through migration, the poorest regions lose their most active and youngest workers, they also lose financial activities, and there is a collapse of small and traditional industries that, as a whole, cannot compete with the rich, developing regions. Thus, continuous growth occurs in developing regions at the expense of other locations and regions (Myrdal, 1957).

Friedman (1966) developed the “general theory of polarized development” as a model of spatial transformation that is linked to national development in societies in transition where regional politics become a critical political issue. The relationship that arises between the center and the margins of the country during the transition to an industrial economy is a colonial relationship because the powerful regions reduce the rest of the economic space to be limited to the roles of the non-major (sub) tributary area. In the “General Polarized Development

Theory" the core regions transmit the pulses of modernization to the margins in which they dominate. These modernizations lead to a conflict between the elite of the core regions and the elite of the marginal regions (Friedman, 1972).

The center-periphery model exists at the global level, the continental level, the regional level, and the city level, as a result of the effects of economic transformation. There are some underlying structural relationships that govern the behavior of the "regional" center and periphery (Friedman, 1966). It is possible to describe the center-margin relationship.It is essentially a colonial relationship, as the marginal "productions" in the center far exceed those that can be obtained from investments in the margin, and what remains of the margin will produce raw materials, specifically agricultural. This leads to the continuation of cyclical trends in inter-regional frameworks in favor of the center. The growing regional imbalance will lead to political pressures aimed at reversing the traditional flow of resources to the center, which may help raise the incomes of individuals on the periphery to reach a level on par with the rest of the population. This can be seen in the civil war in South Sudan and political tensions in western Sudan.

Decision makers in Sudan mentioned many justifications behind their adoption of growth pole strategies in development, including reducing the regional imbalance in development, as distributing development across these polar centers will modernize the backward regions. This is because the spatial imbalance and marginalization of the residents of the marginal areas are ultimately the result of the inevitability of the position of poor regions in the development process (Gilbert et al., 1976).

The adoption of growth pole strategies as centers of modernization in Sudan during the sixties of the twentieth century was influenced by two groups of forces, like the rest of the Third World countries (Appalaraju, et al. 1976), the first is the influence ofthe continuing patterns of relations that were inherited from colonial backwardness, marginal status, and external sovereignty, and the second is the forces that emerged

after World War II and the post-colonial periods and the political economy of the Third World countries individually. Adopting growth pole strategies in Sudan aimed to reshape the spatial system in line with the state's policies for economic and social construction in order to achieve balanced regional growth.

The theory of growth pole strategies had failed in many Third World countries by the end of the seventies. These reasons included that it did not support the development or growth of its geographical backbone, and although it achieved some success in reducing disparities in regional development, it was characterized by weakness as local forces of influence, and at the same time it exacerbated disparities and Internal regionalism, specifically urban-rural disparity.

Dual economic models seek to understand the close relationship between a deteriorating traditional sector and a growing and developed modern sector, which exists specifically in countries that were exposed to colonial rule, such as Sudan. These models include two types, static duality and dynamic duality. Static duality is concerned with the limited overlap between traditional and modern sectors, where several types can be distinguished. There is "social duality" that serves to confirm cultural differences, and there is "cooperative duality of enclave societies" that maintains the behavior of labor, capital markets, and products through which interpenetration occurs between countries, and industrial and traditional societies in the developing world. Dynamic dualism confirms that these two parts of static duality are valid for many developing countries. Agricultural duality exists in Sudan, with two agricultural sectors, one traditional and the other modern and advanced.

The theory of stages of growth was among the development theories that Sudan tried to embrace and which was linked to Marxist thought. It is considered important since it works to organize economic growth through different stages by applying it to the national and cultural borders of countries. Marxist thought assumes the existence of five stages of development. They are primitive socialism, ancient slavery, medieval feudalism, industrial capitalism, and socialism. According to

the views of Marx (1961) and Engels on feudalism, capitalism prevails in class relations in rural areas. Marx considers the growth of agricultural productivity a precondition for the emergence and dominance of capitalism because the basic step in agricultural development is the exclusion of peasant farming in order for structural changes to occur.

List in 1885 developed a classification based on the transformations of the functional distribution to include five stages. They are the stage of naivety, the stage of nomadism, the agricultural stage, the stage of agricultural industrialization, and the stage of agricultural-commercial industrialization. To achieve progress in the field of agriculture, two methods can be followed, either stimulating demand for export or developing local industrial development (List,1885).

Sudanese development planners also adopted the high pay-off input model. This model assumes that there is a switch from the traditional agricultural sector into a productive sector that contributes to economic growth in investment, which will make debt repayment inputs available to farmers in poor countries. There are three types of investment with relatively high productivity in order to achieve agricultural development (Hayami et al. 1971). They are the ability of agricultural research stations to produce new technical knowledge, the ability of the industrial sector to develop, produce, and market new technical inputs, and the ability of farmers who are skilled in using modern agricultural factors. The Sudanese decision-makers were impressed by the high pay-off input model in its adoption of increasing agricultural productivity and diversifying agricultural production, which was placed in Sudanese development plans.

Sudanese development planners also adopted some development theories that treat the process of transition from an agricultural society to an industrial society. One of these theories is the concept of structural transformation which focuses on the primary, secondary, and tertiary stages of production. There are five stages for the leading sectors in the theory of transition, including the stage of traditional society, the stage of tribal conditions for launching, the stage of leadership towards

maturity, the launching stage, and the stage of the era of high mass production (Rostow, 1960), where there is a dynamic role for the agricultural sector in the process of transformation or transition.

Three stages of transformation have been distinguished in Sudanese development (Lee et al., 1977). The first stage is the pre-industrial stage (the period until 1965), which was characterized by the limited application of modern agriculture and limited industrial activity, specifically the presence of few opportunities for employment in the manufacturing industry, limited local savings, a deficit in foreign trade and the need to import capital. The second stage is the emerging-industry stage (the period 1965-1985), during which agriculture continued to expand at a moderate rate, while industrial production grew at a rapid rate, but it was limited only to narrow lines of production groups. The third stage (1985- and beyond) was characterized by the application of modern agriculture for the purpose of export, industrial diversification, and approved savings to finance internal investment needs, providing a balanced business account and unified local markets to achieve economic scales. It can be said that the last stage is unreal, as modern technology has not been applied to agriculture in all countries, in addition to the scarcity of savings, especially since economic crises are considered major obstacles to financing internal investment and the existence of a balanced trade account (Lee et al., 1977).

References:

- Appalaraju J, Satier H.1976. “Growth center strategies in Less Developed countries”. In: Gilbert A(ed): Development planning and spatial structure. John Wiley and Sons, London

- Friedmann J. 1966. Regional development policy, a case study of Venezuela. Massachusetts Institute of Technology. The M.I.T. Press, London.

- Friedmann J. 1972. “A general theory of polarized development” In Hansen N (ed): Growth centers in regional economic development. The Free Press, New York.

- Funnel D.C. 1976. “The role of small centers in regional and rural development, with special reference to Eastern Africa. In: Gilbert A(ed): Development planning and spatial structure. John Wiley and Sons, London

- Gilbert, G., Goodman, D.E.1976. “Regional income disparities and economic development, a critique. In: Gilbert A(ed): Development planning and spatial structure. John Wiley and Sons, London

- Hayami Y, Ruttan V.W.1971. Agricultural development, an international perspective. The John Hopkins Press, Baltimore, and London.

- Lee, F.A, Brochs, H.C.1977. The economic and political development of the Sudan. MacMillan, London.

- List, F.1885. The national system of political economy. Longman, Green and Company, London. Reprinted by Augustus M. Kelley, New York (1966).

- Marx, K. 1961.Capital. Vol. 1 and 11. Foreign Languages Pub. House, Moscow.

- Myrdal, G. 1957. Economic theory and underdeveloped regions. Gerald Duckworth, London.

- Rostow, W.W. 1960. The stages of economic growth, a non-communist manifesto. Economic Journal 66. University of Cambridge Press, Cambridge.

4

Regional Development Policies of Sudan : 1899 - 1993

4

Regional Development Policies of Sudan : 1899 - 1993

The natural and human components of Sudan provided the necessary infrastructure for the implementation of economic and social development plans, especially for agricultural development. Many development plans were drawn up during the British colonial period and subsequent periods of national governments. Differences in the physical and environmental characteristics of Sudan, and the associated social and administrative obstacles and challenges in its various regions, have influenced the success of implementing these targeted regional development policies.

1. Briefing physical resources for development in Sudan

Before the secession of the South in 2011 AD, Sudan was considered the largest African country in terms of area (2.411 million km2), but it shrunk to an area estimated at about 1,800,000 km2 and began to extend between the two circles of latitude (8˚ 45´ - 23˚ 8´N) to the north and two lines of longitude. (21˚ 49 - 340 23/) east, and has land borders with several countries and maritime borders on the Red Sea coast. This great latitudinal extension, enormous area, and long maritime borders gave great importance to its geographical location and geopolitical status. The surface of Sudan is mostly flat, as we find, based on sea level, that 45% of its area ranges in altitude between 300-500 meters, 50% of which is less than 1,200 meters in height (Barbour, 1961), and 2% of which is less than 300 meters. The Jebel Marra area, which reaches an altitude of about 3,089 meters, is considered the highest area, and the Red Sea Mountains occupy 2.7% of the area of Sudan.

There are three groups of basic rocks in Sudan, distributed in varying proportions over the total area of the country. They include bedrock

(48%), sedimentary rocks (47%), and modern deposits (3%) (GRAS, 2006), in addition to the Umm Rawaba sediment series, which covers a wide area of central and northern Sudan and consists of clay, unconsolidated continental sand, and sandy clay. These geological formations contain metallic and non-metallic minerals such as deposits of iron ore, kyanite, nickel, talc, tungsten, zinc, gold, chromium, manganese, salt, and mica.Rocks are a source of different types of soil in Sudan. There is sandy soil in the desert and semi-desert regions in northern and western Sudan. It is characterized by fragile and low-fertile soil that is used to grow many cash crops and important pastures for livestock and camels. Clay soils, which are classified as vertisols in three of the international soil classification systems (Blockhuis, 1993), are found in central and eastern Sudan and extend from west of Kassala through the Jazira region and then South Kordofan. They are the main agricultural areas for the production of corn, cotton, and mechanized agriculture, and a major source of agricultural products, forests, especially Gum Arabic.

The soil between the White and Blue Nile includes two groups of soils. There is the riverine soil, which includes the silt of the White Nile, the silt clay of the Blue Nile, and the various soils that consist of sand and silt with a mixture of fine materials, and the silty soil that is found in the lower valleys of the White Nile and along the Blue Nile and the Nile River up to the High Dam Lake, the Gash Delta, and the Khor Baraka Delta. (Library of Congress, 2007). There is a dark clay group located above the current flood level of the rivers between the White and Blue Nile (Mubarak, 1982).

Rainfall distributions in Sudan follow seven natural vegetation ranges, starting from 0 mm in the north to 1,500 mm in the south. The extension of Sudan into thirteen transverse circles resulted in the desert and semi-desert regions located north of 16° north latitude, forming 30% and 20% of its area, respectively, while the savanna region, which extends from 10° to 16° north latitude, constituted about 38° % of its area. It is rich in natural collections of more than 100 species of trees, which

differ greatly between them, and at the level of the same species, due to the difference in amounts of rain and soil type (Omer, 2005). They form the natural pastures, most of which are found in Kordofan and Darfur, and occupying an area of 110 million hectares. Nearly90% of the livestock in Sudan are raised in the traditional pastoral system that relies on natural pastures that provide 86% of the feed for the herds, concentrates provide 4%, while irrigated fodder, crop residues, and agricultural by-products provide 10%. Sudan annually produces about 18.6 million tons of crop remnants and less than 126 thousand hectares of cultivated fodder (Babiker, 2015).

Rainfall provides an important main natural resource, contributing about 400 billion cubic meters annually to the total water in Sudan. The amount of water available to Sudan annually is about 30 billion m3, less than 50% of which is currently exploited, and the annual per capita amount is less than 1000 m3 (<1000 m3) (Babiker, 2008). However, water is considered limited for Sudan, despite the abundance and availability of land for irrigation, due to its geographical location upriver in relation to Egypt and downstream in relation to Ethiopia and the tropical lakes (Osman et al., 2005).

Sudan's flat surface, rock formations, and wide latitudinal extension provide enormous potential for agricultural investment and pastoral activity. Agricultural activity in Sudan is based on these resources to accommodate about 75% of the total population (Dawelbeit et al., 2010). They are more concentrated in the clay plain in the Geziera region and the narrow strip on the Nile, where the population density reaches 87 people per km compared to the average general density which is 4 people per square kilometer (Dawelbeit et al., 2010).

2. Regional development policies in the colonial period: 1898-1956

Pre-British colonial society in Sudan was a closed, traditional society that relied on a self-sufficient rural economy. The colonial government worked to change the sufficient rural economy existing in Sudan into a

modern economy by establishing separate economic policies covering four periods: the period 1899-1918, the period 1919-1939, the period 1946-1951, and the period 1951-1956 (Beshai, 1976).

Priority was given to agricultural development, and even the infrastructure that was built was allocated to serve agricultural expansion in central Sudan. In the period from 1899-1918, emphasis was placed on the infrastructure economy, such as the telegraph and transportation lines, in preparation for modern agriculture, as agriculture received only 1.8% of the budget (Beshai, 1976). In the period 1919-1939, the investment pattern changed completely, as spending on transportation was reduced from 76.3% to 26%, and spending on agriculture was increased to 58% through the introduction of irrigated agriculture schemes, such as the Geziera Cotton Production Scheme. Accordingly, a large portion of self-sufficient agricultural land was converted to agriculture for the purpose of export.

The British administration has developed modern agriculture in the island region since 1925 over an area of 240,000 acres.It rose rapidly to 670,000 acres in 1931 and covered 1 million acres by 1954 (Ali, et al., 1984). In 1946, the government proposed a five-year development program for the post-World War II period. This program is considered the beginning of planned development in Sudan, as varying percentages were allocated to various economic sectors. 16.1% was allocated to agriculture, 13.7% to irrigation, 0.7% to veterinary services, 8.6% to education, 6.2% to health, and 21.8% to railways (Beshai, 1976). The agricultural development policy also extended to include areas along the Blue and White Nile, where private agricultural schemes irrigated by pumps along them grew very quickly and doubled in number between 1952 and 1956.

Corn and sesame production began in the Gedarief region during World War II, and an area of 54,000 acres was added in 1954, then quickly increased to one million acres by 1959 (Simpson, 1980). One of the major achievements in the field of agriculture is the raising of the Sennar reservoir, which enabled the completion of the extension

of Managel to the Geziera scheme, and the mechanization of corn cultivation. During the development program for the period 1951-1956, 16.8% was allocated to agriculture, 27.3% to social services, 26.8% to communications, 13.4% to public utilities, and 13.8% to administration (Beshai, 1976). What distinguishes this program is the shift from investment in irrigation and public works to transportation and public services. The railway system was extended to the south within the central rain-lands, increasing the load capacity of the entire system. The extension of the Gezira scheme also began, providing drinking water to the dry parts of western Sudan, and exploiting Gum Arabic from Kordofan.

The pattern of development during the colonial period focused on the mudflats of central Sudan for the production of cash crops, especially cotton. Even the provision of infrastructure, especially railways, was intended to connect cash crop production areas to these central areas. In addition to agricultural expansion in the mudflats of central Sudan, the British administration developed modern communication systems such as radio, telegraph, railways, roads, and airports, and applied modern urban planning to the cities in central Sudan, so that some cities began to dominate Sudanese life, such as Khartoum, WD- Madani, Sennar, and Gedarief where their population began to increase rapidly due to the concentration of development in this region.

The five-year post-World War II development program in 1946 included three major irrigation schemes: the construction of the Roseires Dam to enable expansion and intensification of crops in the Gezira Scheme, and the development of new pump schemes on the Blue and White Nile. This led to an increase in the irrigated area by 1,200,000 acres. As for the second scheme, it enabled the extension of the Managel to expand the cultivation of long-staple cotton and the production of corn. The Khashm al-Girba reservoir also added 500,000 acres to Sudan's irrigated areas. This plan proposed the expansion of agricultural schemes for pump irrigation in the Upper Nile, the development of Jebel Marra, the development of tea and coffee cultivation in South

Sudan, the development of Al-Dali and Al-Mazmoum, and the Agadi scheme and the Sesame areas for the production of corn and sesame.

The policy of diversifying agricultural production aimed to introduce peanuts, castor, and other oil seeds, corn, wheat, and kannaf. The import substitution program also proposed expanding the production of sugar, wheat, rice, and coffee. The program also encouraged the cultivation of short-staple cotton in the rain-fed sector. Agricultural expansion and investment have led to increased inputs by increasing planted areas and applying some modern agricultural techniques. The area of the Geziera scheme increased to about 2,000,000 acres as a result of the expansion of the Managel. The number of tractors also increased from 2,040 to 8,000 and the number of plows used from 120 to 700 (Lee et al., 1977). The population of the city of Gedarief increased from 12,000 to 24,000 between 1950 and 1960 AD, as large numbers of citizens of Kordofan, Darfur, Nigeria, and traders from northern Sudan arrived (Davies, 1964).

3. Regional development policies in the post-colonial period: 19561993- AD

Many development plans were formulated following the departure of British colonialism. In the 1957-1961 development program, agriculture received an estimated percentage of public investment amounting to 28.1%, as did the transportation sector, and 30.2% was allocated to administration and social services. Among the major government schemes were the extension of Al-Manaqil to expand the Geziera scheme, preparations to build the Al-Rossaris farm to introduce more agricultural lands under irrigated agriculture, preparations for the construction of the Khashm Al-Qirba reservoir, and the construction of the Al-Junaid sugar factory and the sugar cane farm associated with the factory. The program allocated 19.9% to industry for the first time in the history of development planning in Sudan. There has been a noticeable increase in the number of private agricultural schemes that are irrigated by pumps. The expansion policy continued to search

for ways to improve the traditional rain-fed sector away from private mechanized agriculture during this program.

The ten-year plan 1961/62 - 1970/71 set a rate of 29.9% for agriculture and irrigation, and estimated percentages for the mining, industry, transportation, public utilities, education, and health sectors from the state's general budget (Ministry of Finance and Economic Planning, 1961). The ten-year plan focused on large irrigation schemes and types of industry based on processing these agricultural products.

The Five-Year Plan 1970/71-1974/75 emphasized both aspects of goods produced and goods consumed, both of which were taken from the Marxist development model that aimed towards social planning for development while securing foreign-owned businesses and reclaiming agricultural land. Large increases were also allocated to the sectors of education, culture, health, and public services, the development of urban and rural energy networks, increasing exports and reducing imports, and urban and rural water, especially pits for watering humans and animals.

The five-year plan was amended to cover the period up to 1977, a great consideration was given to agricultural development, such as improving the efficiency of existing agricultural schemes, achieving self-sufficiency in all imported agricultural products, and regional integration of agricultural production. It also aimed to increase agricultural production through the development of hydroelectric energy and included increasing the use of Sudan's share of the Nile water, developing other water sources in parts of Sudan, and additional provision of hydroelectric energy. The development schemes that were previously proposed or new schemes included Northwest Sennar Sugar Factory, Al-Rahad Scheme, Sennar Dam, Al-Kanaf scheme in Abu Naama, replacing flood irrigation with relief irrigation in the northern state, and expanding the wheat growing area in the Geziera Scheme.

Agrarian reform schemes have also been designed to increase productivity through electrification, reorganization of land uses, and improved management policies. It also aimed to promote industry and in-

ternal and external trade and proposed programs for the development of natural resources. These included the development of water and forest projects and rural development. Underground and surface water programs included drilling and maintaining wells, expanding water recording stations in large valleys, feasibility studies to provide drinking water to large cities, and building dams and excavations. As for forest development programs, they included developing the Gum Arabic belt and increasing Gum production to increase production to 2,500 tons annually, in addition to feasibility studies for preserving forests, developing forests in desert areas, and ongoing research to improve the use of forest capabilities.

The rural development stage also found cooperation with various specialized institutions interested in promoting and developing rural development, through the settlement of Bedouins and the development of the Abzi scheme as a future model for cultural integration between North and South Sudan. The inclusion of Bedouin settlement in this development plan is due to several reasons, including the belief in the necessity of providing social services, as the settled man is considered to be at a higher level of development than the Bedouin man, in addition to including sections of the population within the monetary economy (Pearson, 1980). There are those who believe that including the Bedouins within the capitalist system of production has led, as is the case in the Babanusa scheme to produce dry milk in western Sudan, to a conflict of interests between the aspirations of the Bedouins and the owners of the scheme, as the Bedouins' resistance to this development scheme was based on their doubt about the real goals of the government (Almoag,1983).

The Six-Year Plan 1977/8 - 1982/3 aimed to push the Sudanese economy towards self-sustaining growth, reduce the ratio of agricultural income to non-agricultural income, expand social services, and balance the regional distribution of investment and provision of food products by focusing on agricultural industries and importing alternative industry (Ministry of Finance and Economics Planning, 1977). This plan

focused on developing the traditional agriculture sector, preserving Sudan's national wealth, achieving self-sufficiency in food, increasing agricultural inputs, stimulating rural development and community participation, and relying on regional planning to highlight that development schemes come through the special capabilities of each region. Therefore, 27% of the budget was allocated to agriculture and irrigation, 22% to industry and mining, and 21% to social services. Agricultural development strategies included vertical expansion to achieve the maximum possible use of various resources and horizontal expansion to increase production through extensive agriculture, focusing on rain-fed agriculture areas. It proposed implementing these strategies by modernizing the traditional sector by introducing mechanized agriculture, increasing animal and fish production, taking measures to combat animal diseases, establishing integrated agricultural-animal production schemes, surveying fish wealth resources, and organizing fish cooperatives and processing mechanisms.

The intensification of the expansion of agriculture the Six-Year Plan 1977/8 - 1982/3, proposed rehabilitating public sector schemes and completing schemes under implementation throughout Sudan. These schemes represent carefully planned regional capacity development, such as the Geziera Scheme, and the development of local pressure group activities, such as the implementation of the Sag Ana 'am scheme (Thimm, 1979). These schemes were included in what is known as the policy of transforming Sudan into the world's food basket, which aimed to attract investments from Arab countries, especially in the field of animal production, mechanized crop production, and industrial-agricultural production such as the production of meat, leather, and fodder. The Nuba Mountains scheme was considered a model that could be taken to build commercial schemes in the traditional subsistence sector. This scheme included some partially mechanized government-run farms that produced cash crops and food crops for local consumers. For the first time in the history of Sudan, the huge resources of the traditional sector were realized in this development plan.

The political system in Sudan changed after the fall of the rule of Jaafar al-Numeiri, and elections were held in 1986 AD. The period from 1986 to1989 AD witnessed political instability, deepening social problems, civil war, and tribal tensions in a number of parts of Sudan. No development program was announced during these four years by the elected government. In June 1989, the National Salvation Government came and proposed a program to rescue the Sudanese economy to cover the period 1990-1993. Ways to achieve the program included focusing on agricultural development, implementing the liberalization policy for export goods, encouraging the private sector and citizens to invest, and removing administrative, economic, and legal obstacles through institutional reform to attract investors.

This program adopted growth through capital incentives to accelerate agricultural development in Sudan.All state-owned agricultural enterprises have been floated, privatized, or sold. In view of agricultural development through policies to encourage the exchange of commercial and foreign resources (NESP, 1990) by increasing exports, especially livestock, including cows and sheep, and some non-traditional and new crops in the field of export, such as maize, and liberalizing export prices, with the exception of cotton and Gum Arabic from this policy during the period 1990. /91, removing marketing control from all agricultural commodities and introducing a retention reserve system for all exporters of up to 40% for traditional exports and 100% for new marginal goods, on the condition that exporters use it to provide financial support for production inputs and priority industries such as food industries, agricultural inputs, devices, and machinery. The program also encouraged agricultural and livestock production and investment by providing appropriations and providing guarantee loans to encourage agricultural dependence.

References:

- Ali, T., O'Brien, J. 1984. "Labor, community, and protest in Sudanese agriculture" In: Barker, J. (ed): The Politics of agriculture in tropical Africa. Sage series on African modernization and development. Sage Pub. London.

- Almoag, S.M.1983. Tribal systems as obstacles to rural development, a case study of two rural development schemes in Sudan. Unpublished M.Sc. economics, University of Wales.

- Babiker, I.A.,2015. Animal feed industry in Sudan, current status, problems and prospects. J Dairy Vet Anim Res 2 (3):0036.

- Barbour, H.K. 1961. Geography of Sudan, Oxford University Press, London.

- Beshai, A. A. 1976. Export performance and economic development in Sudan, 1900-1967. Middle East Centre, St. Antoney's College, Oxford. Ithaca Press, London.

- Blockhuis, W A. 1993. Vertisols in the central clayey plains of Sudan. Washington dissertation abstracts 158 (12).

- Dawelbeit, S.E., Salih, F.M., Dahab, O.A., Ahmed, E.H. 2010. Status of fertilization and crop nutrition in irrigated agriculture in Sudan: Fertilizer use in Sudan. Research Findings: e-ifc. No 22.

- Library of Congress. 2007. Soils of Sudan. https://country studies. us./Sudan/31.htm.

- Ministry of Finance and Economic Planning. 1961. The ten-year plan 1961/62 - 1970/71 p 7.

- Ministry of Finance and Economic Planning. 1977. The Six-Year Plan 1977/8 - 1982/3.

- Mubarak, M.O.1982. "The vegetation of central Sudan" In Williams, A J. et al. 1982: A land between two Niles.

- NESP, National Economic Salvation Program. 1990. P 8/9.

- Osman, E.H., Atta, B. 2005. Sudan and the Nile Basin. Aquatic Sciences 67 (1):28-41.

- Pearson, M.1980. Settlement of pastoral nomads, a case study of

the New Halfa irrigation scheme in Eastern Sudan. Development studies occasional papers 5, University of East Anglia.

- Simpson, I.G.1980." Institutional constraints to agricultural development in Sudan" In Post-Independence Sudan. Proceedings of a seminar held in Center of African Studies, 21-22 November, University of Edinburgh.

- Thimm, H.U.1979.Development schemes in Sudan, an analysis of their reports with implications for research and training in arid land management. Food and nutrition bulletin 11: 41-45.

5

Impacts of the Theoretical Bases of Sudanese Development Planning from 1898- 1990

5

Impacts of the Theoretical Bases of Sudanese

Development Planning from 1898- 1990

Sudanese development planning was designed on various sources of theoretical bases where many relevant central problems were initiated. The agricultural production systems in Sudan before the advent of colonialism were characterized by the presence of two ecological strategies. First, the practitioners of nomadic pastoralism and shifting agriculture benefited from the advantage of accumulating nutrients available from the energy of harvestable food due to their continuous movement. Second, they benefited from the flood irrigation strategy that takes advantage of the flows of water and nutrients through technology and simple methods to overcome moisture and fertility problems in soil (Cox et al., 1979).

The British administrators brought most parts of tropical Africa into the global exchange system by introducing some basic cash crops, which affected the development of self-sufficient agriculture and imposed external factors. The success of producing cash crops depended on the relationship between that crop and the existing complexity of food crops and the exchange mechanism. The inclusion of self-sufficient agricultural systems into capitalist methods of production has changed the entire food production system in Sudan. The traditional agricultural system based on communal ownership collapsed under the influence of colonial economic policies and foreign control activities (La-Anyane, 1985).

The differences in natural conditions and economic resources in Sudan and the demands of the colonial state, the means used to transform

self-sufficient farmers differed greatly, as did the degree of intervention of the colonial state in this regard. As a result, this has affected the regional and sectoral development of the country. During the colonial period in Sudan, the country was a margin that produced cotton for the heartland region, which was British, and similarly produced food to meet local demand. In western Sudan, the impoverishment of self-sufficient farmers by including them in the capitalist economy through cash crops led to the instability of families to fully reproduce themselves in agriculture, as large numbers of the population, especially young males, were forced to lose income from their work in production, on the entry of wage labor economies in cities (Ibrahim, 1978).

The British administration has neglected the traditional sector for several reasons. They include the fact that this sector requires a large monetary supply to raise its productivity, the fragility of its production, and its susceptibility to failure, and it cannot produce long-staple cotton, which is considered the most profitable crop in the international markets. The British also realized that they would not stay in Sudan long, so they focused their efforts on exploiting the easy-to-exploit clay plain in central Sudan. The preference for the modern agricultural sector over the traditional sector has resulted in a clear inconsistency in the patterns and characteristics of production in the modern export-oriented sector, and between those patterns and characteristics that prevail in the traditional sector. This traditional sector is characterized by the lack of surplus raw materials that developed countries need for recycling and processing in their factories and by the presence of a geographical hinterland in which a population lives, the majority of whom work to produce food and local consumption.

The application of the concept of cumulative causation has led to the emergence of agrarian duality between a modern and developed irrigated agricultural sector and a traditional and backward rainfed agricultural sector. This latter sector is characterized by several characteristics, including its inability to absorb large employment, unemployment-underemployment, low annual productivity, and ze-

ro-marginal productivity for the worker. Meanwhile, the modern irrigated sector in central Sudan has received extensive research on the possibility of applying high-yield seed types and modern methods for improving husbandry crops, chemical fertilizers, marketing services, financial credit assistance, and others. Agricultural development and the establishment of industries and basic services in the mudflats of central Sudan by British rule provided the infrastructure for cumulative causation to operate.

Also, the major consequence of implementing cumulative driver policies in Sudan is the emergence of pockets of food deficit in degraded regions such as Kordofan and Darfur, especially in the northern ranges adjacent to the Sahara. The deterioration of traditional agriculture and income distribution is considered one of the most important causes of the food deficit there (World Bank, 1990), as farmers, who were previously exposed to the blows of weak development policies in Sudan, are concentrated in these marginal lands (Green, 1986).

Related to the previous results is what is known as center-periphery relations, between the core region, which is central Sudan, and the margin regions, which are the other parts of Sudan. The mudflats of central Sudan were imposed as a core region, it created a state of organized dependence on its margins through the construction of institutions in the marginal regions governed by the authorities of the core region (Friedmann, 1966).

The inclusion of the resources of the marginal regions within the heartland region of Sudan can be seen, for example, through the impoverishment of self-sufficient farmers by introducing them into the capitalist economy through cash crops. This led to the impoverishment of families in Darfur in reproducing themselves entirely in agriculture (Ibrahim, 1978), and for government authorities to control small producers in the Umm Rawaba region in Kordofan through a policy of converting an estimated portion of crop production in the traditional sector to commercialization during the period 1983-1984 (Khogali, 1991).Self-sufficiency agriculture was also exposed to threats of depletion of its re-

sources, such as manpower and the continuous transfer of (value) costs at the expense of the pockets of the traditional sector through the export sector, which works in the interest of the market economy (OestedieKhoff et al., 1980). The inevitable result of this was the depletion of the value of the surplus from the traditional sector.

The agricultural regions for the purpose of self-sufficiency have formed margins that produce manpower for the core regions. These margins are exposed to strong negative forces aimed at countering the trickle-down effects of economic growth so that the balance of this group of forces increases the process of regional imbalance. Likewise, centrifugal forces and the failure of businesses to realize investment opportunities at the margins lead to negative effects of industrial development to expand the regional imbalance in Sudan.

The emergence of "growth poles" to overcome these contradictions led to the emergence of new centers of depletion on the margins of Sudan. The development of growth pole centers is called "polar development", which is considered an important focus in Sudan due to the prevalence of the concepts of "redistribution with growth", where two forces influence these policies (Appalraju et al., 1976). First, there are the forces of influences and persistent patterns of relations inherited from situations of colonialism, marginality, external domination, and internal underdevelopment. Secondly, the forces that emerged after World War II, in the post-colonial periods, and the political economy of the Third World countries.

The distribution of many growth pole centers has covered different parts of Sudan. Examples of this included the Kosti Meat Factory, the Babanusa Dairy and Cheese Production Factory, the Sag el Na'am Project in Darfur, the development of the Habila region in the Nuba Mountains, the construction of the Kadugli Textile Factory, and others. Many projects were developed at the national level but failed at the local level (Arifi, 1978). The inclusion of Bedouins in the case of the Babanusa project to produce powdered milk for markets created a conflict between the aspirations of the Bedouins and those responsi-

ble for the project. The Bedouins' resistance to the project was based on their doubts about the government's true goals (Al Mowag, 1983). The closure of open pastures and imposing them on certain individuals or groups has also, led the Bedouins to find themselves forced to live in a fence or stop their ownership according to what is determined by the project. The shortcomings of the livestock production system and pasture management in motivating Bedouins to adapt to living in a fenced pasture system have become clear (Behnke, 1985).

Sudan inherited, following colonialism's departure in 1956, a dual economic system consisting of a broad sector of traditional rural agriculture alongside a small modern non-agricultural sector. Development efforts during the British colonial period and subsequent national governments resulted in a pattern of polar development centered around the fertile areas in central Sudan, which have high potential in agricultural and livestock production in addition to water sustainability compared to the regions of western and eastern Sudan and the far north of Sudan. The Gezira scheme played a paradoxical role in the capitalist transformation of Sudan, as it worked to strengthen non-capitalist production relations and develop marginal capitalism (Tony et al., 1991). The areas previously developed by colonialism continued to attract agricultural production, industries, and urban growth, which led to its continuation as the heartland region of Sudan.

In the post-colonial period, the neglect of the traditional agricultural sector can be attributed to the focus of Sudanese development plans on short-term investment returns, which the modern agricultural sector achieves with high reliability, and the belief that the future lies in the mechanization of agriculture production and the commercial aspects associated with it. In addition to that, the dominance of the concept of the unrecoverable expenses of an investment in this sector, the tyranny of development thinking of the colonial era, the lack of appropriate methods and methodology for developing natural and human resources in it, and the difficulty of collecting taxes, and its need for huge financial credits and loans that Sudan cannot meet.

One of the positives of adopting dual economic models was that Sudan made great efforts during the colonial period and after its departure in intensive scientific research on the possibility of applying high-yielding seed types, modern methods of growing crops, and the use of fertilizers, and in researches related to marketing, and financial security assistance for modern agriculture and irrigation destined for export. The shortcomings of dual economic models have contributed to further neglect of this sector, such as their treatment of agricultural productivity gains as a factor that transforms the agricultural production function without imposing a demand on resources, in addition to their neglect of the problems of resource use in intersectoral goods markets (Hayami et al., 1971).

The application of the high pay-off input model in Sudan has many shortcomings such as not including the way in which resources will be allocated between alternative public and private sectors of economic activity, and not treating investment in research as a source of mechanisms for High debt repayment, in addition to not explaining how to develop and localize technologies in a specific society governed by economic conditions.

The adoption of the theory of diffusion of innovation in Sudanese development resulted in the introduction of modern agriculture since the period of British colonialism in Sudan, then the introduction of modern agricultural machinery such as tractors in the extensive rain-fed agriculture in eastern Sudan, then in the regions of the Blue Nile, Kordofan and Darfur, and the associated development of agricultural research and training of cadres. Working and improving the breed of cows to increase milk and meat production, as types of cows were brought from the temperate regions and were crossed with local types to produce milk during the plan to make Sudan the food basket of the world, in addition to fodder production. In the field of improving poultry, a new type that produces more eggs and meat was introduced and implemented by the state, such as Geziera Farms for dairy products and Hillat Kuku Farms for dairy products, as well as by the private sector.

The adoption of the concept of diffusion of innovation during the colonial period led to the improvement of some sectors of the macro-economy, but the transfer of technology created some aspects of conflict, such as the different views of participants who worked in institutions, consulting bodies, and others toward technology. Some view technology as a marketable commodity, while others see it as challenging the prevailing traditions in traditional societies. This is because it stimulates citizens to do different things in different ways and also proposes new goals for human efforts such as obtaining money and the dynamics of desires, and some view growth economics as a demand for social justice (Goulet, 1975).

According to Marx's five stages, Sudan can be placed in the feudal stage of the Middle Ages, while according to List's classification, it can be placed in the second, third, and fourth stages. The nomadic stage still exists in parts of western, eastern, and southern Sudan (formerly). Feudalism prevails in rural areas where farmers have large holdings or ownership of agricultural land. This feudalism is characterized by unfree labor, forced economic coercion in excess of withdrawing the surplus, and the integration of economic and political forces at the point of production and the living economy, where the surplus is consumed and does not accumulate in the form of expanded production. In the feudal system, ownership of the means of production is divided between the direct producers and the ruling class of the land, which takes the surplus production in the form of rent for working time, production, or money (Alavi, 1982). As a result, a two-class model of feudal society will emerge. This can be represented in Sudan by the production of crops on the island of Aba, where farmers produce for the Mahadi family who own the land. This may provide an understanding of what tensions exist between the landless class and direct producers in the Third World (McEachern, 1982).

Writings on colonialism and associated changes have characterized some parts of the Third World economy as feudal or semi-feudal, with colonial societies resembling European societies before the advent

of capitalism. Feudalism embedded embryonic in the relations of advanced capitalist production and the environment available to it in the Third World helps in the maturity of these relations to liberate the rapidly growing capitalist incursion into these countries. During the British period in Sudan, tribal chiefs and clerical leaders received the largest private pump projects on the Blue and White Nile. Sayyed Abd al-Rajman al-Mahdi received the Gezira Aba area in the White Nile, in addition to 9,000 hectares of arable land on the Blue Nile (Ali et al., 1984), and likewise Sayyid Ali al-Mirghani and Sharif Youssef al-Hindi in the Gezira and Blue Nile area.

Capitalist feudal production relations in these agricultural holdings were applied, where farmers were responsible not only for basic agricultural operations, but also for expenses on the main irrigation canals, installation of pipes, and the cost of cotton production. The tenancy arrangement in the island project also relied on pre-colonial social relations existing inIrrigated agriculture. The socio-economic structure of the island witnessed a fundamental transformation in the process of colonization, represented by the method of transforming land into a commodity and labor into a factor of production. This process enabled certain classes in the social structure in the Geziera region to achieve economic sovereignty, and these classes maintained their positions as money lenders in a production structure that allowed production at relatively low prices compared to the prices of imported manufactured goods. Feudalism has undergone great changes in the years followed Independence in production relations and the shift from joint to individual accounts in the Geziera project in the late 1970s.

The application of these development theories and concepts, generally, has negative impacts on food security in Sudan. The traditional sector in Sudan has faced the risks of depleting resources, such as the labor force leaving the food production system, and the continuous shift of cost (value) in traditional agriculture into the export sector in favor of the market economy leads to the exploitation of the surplus value in this sector. This phenomenon is not limited only to migration

and the internal labor force, but it is a characteristic associated with all production processes where traditional agriculture and market economies overlap (Oesterdiekhoff et al., 1980).This same situation can be applied to the production of cash crops in the traditional sector and the production of food for farmers and agricultural labor in export-oriented agricultural projects. The combination of the cumulative effects of capitalist agricultural expansion under Arab capital during the 1970s put Sudan on a path of increasing food deficit.

Farmer producers faced a rapidly declining ability to meet their consumption needs, including food, through direct production at the same time as capitalist rain-fed agriculture was reoriented toward production for increased export (O'Brien, 1985). This has produced groups exposed to food insecurity. They included the group of poor rural families who lack access to good land, some of whom depend on wage labor in areas of irrigated agriculture and mechanized rain-fed agriculture, and the group of landless people who will be expelled to marginal lands in valuable traditional rain-fed agriculture areas, relatively high actual value (World Bank, 1990). It is clear that groups of food-insecure people are entirely limited to developmentally backward regions.

The application of these theoretical concepts of development in Sudan also has many environmental impacts. Efforts to develop rain-fed agriculture in northern Sudan focused on the latitudinal belts of the semi-desert and lower savanna. They followed three methodologies, including land use planning, conducting agricultural research, and stimulating the private sector. The land use planning methodology has failed due to the lack of guaranteed land ownership and the private sector's lack of motivation in agricultural planning and research (Wallach, 1989).

The establishment of large mechanized agricultural projects, the concentration of the population around water sources, and the growth and development of large urban centers with high demand for firewood for fuel and charcoal also contributed to environmental degradation. These effects were multiplied by the use of laws displacing traditional

farmers and Bedouins from their lands in favor of large agricultural projects. As a result of the difficulties that the state faced in achieving its goals, there was a shift from development to crisis management and from crisis management to achieving order and mastery.

The government's inability to intervene on behalf of the victims of drought and famine led to it using subjugation as the only means of legitimizing its use of force (Salih, 1990).Rapid population increase and climate change may reduce the carrying capacity of the land in the long term (Martin, 1975), and there is a need to expand the far-flung transportation system for agricultural areas to develop along with an adaptive physical plan for transportation under four scenarios including the reference project, agriculture for export, and growth balanced regionalism and a common Arab-African orientation (Thomas, 1977).

Intensive agricultural expansion has contributed to the degradation of natural vegetation and provided inimical conditions for sustainable agricultural production. The intensive expansion of mechanized rain-fed agriculture has been linked to the factor of high economic returns from crops, especially corn, and has also been affected by other factors outside the agricultural sector. Large commercial agricultural projects had proven to fail before the economic crisis, political instability, and natural disasters in the mid-1980s in Sudan and it is difficult to say that any of them have achieved commercial success (Kontos, 1990).

The application of these theoretical concepts of development planning also resulted in conflict over resources, which occurs at the level of local communities and is exacerbated by state policies. This type of conflict in its traditional form in Sudan was the ancient competition between farmers and nomads over water and land resources. Because of its persistent nature, it took on an "ugly" identity that tore the country apart and became a challenge to many regions of Sudan (Assal, 2006). This type of conflict has also played a role in creating poverty and leading and sustaining the ongoing conflict, where the challenge lies in its ongoing complexities, not only in recognizing its dynamism as a manifestation of large political cleavage entities but in the pres-

ence of an agenda that pushes it from the top down and from the bottom up (Gunnar et al., 2010).

Environmental degradation or environmental scarcity (environmental discrimination) causes conflict when it interacts with economic, social, and historical factors. Environmental scarcity of renewable resources, especially agricultural cropland, freshwater, marine resources, and forests, is becoming more important as a cause and/or catalyst for armed conflict especially in the developing world (Suliman, et al., 2005). The conflict in Darfur is considered an ecological conflict in origin, based on competition over natural resources, which included plant genetic resources.

Despite the soft environmental balance, the lifestyles of farmers and Bedouins, through good use of water and genetic plant resources, have preserved the region's ecological balance (Robinson, 2005). It can be said that the government's attempt to make the Shukria tribe into medium-level stable farmers was successful because of some factors that hindered and determined their adaptation to the mixed economy and the subsequent ecological results and returns (Gunnar et al., 1977). Oil has played a role in the perpetuation of conflicts in Africa and Sudan, which confirms the relationship of natural resources to armed conflict. "Economic" businesses associated with violence and theft are not new in their connection to aspects of war, but what was new about many conflicts was the extent to which economic interests prevailed and competed with political programs (Reno, 2003).

The application of these theoretical concepts to development in Sudan has also disturbed the fundamental relationships between people and land under new dynamics of land encroachment and resource withdrawal. Although land has become a global commodity, it remains a source of livelihood and a basic reference for identity formation. The economics of resource withdrawal have spatial impacts that include foreign ownership of agricultural land, and competition between the industrial and traditional sectors in gold mining. People have experienced the loss of their lands during the recent waves of privatiza-

tion and the commercialization of land rights in the regions of Darfur, South Kordofan, Red Sea, Blue Nile states, and Khartoum state (Gertel, et al., 2014). The eastern region of Sudan attracted large numbers of Bedouin refugees from the long war in Eritrea, and one of the most important consequences of their resettlement was the creation of intense conflict over land rights along the Ethiopian border, which resulted in the threat of nomadism and the extinction of herds (Bascom, 1990).

The conflict between North and South Sudan continued after the redrawing of the international borders between them, reaching the issue of ease of access and availability of lands. The claims of both parties to ownership of the borderlands between them have faced challenges from local and international actors, as contracts governing the privatization of natural resources continued, causing destabilization of land ownership.

One of the main consequences of applying these theoretical concepts in development planning in Sudan is the inability to address the problem of rural poverty. There are many major constraints to understanding the nature of rural poverty in developing countries. These obstacles arise not only from the nature of rural poverty itself but also from the circumstances of those who are not rural poor and who are aware or not aware of the nature of that poverty. This dialectic has implications for all rural development programs and projects and for trained workers (Chambers, 1981). As an example, the results indicated a decrease in poverty, income, and expenditure indicators among the Water Users Association in the Al-Gash Agricultural Scheme compared to non-farmers. Fundamental differences were found between them in the family income trend, the total return from agriculture, years of education, and the total cost of agriculture. Moreover, households headed by a member of a water users association are more likely to have income approximately four times above the poverty line than those whose heads do not belong to this association (Mohamed et al., 2015).

Sudan was expected to achieve high growth rates after independence due to its extensive, fertile, and rich agricultural lands, significant livestock component, and capable human resources. Much of this has not been achieved in the last five decades. After enjoying moderate rates of growth and economic stability until 1975 AD, Sudan began to enter into deep structural problems. It was found that the causes of rural poverty in Sudan are linked to the bias of development strategies towards urban areas since independence (Yaqoob, et al., 2016).

The national governments of Sudan have sought to reduce the poverty rate, however, despite that, it is still widespread (Abdelmawla, 2014), showing a pattern characterized by unidimensional and low multidimensional occurrences for both children and adults. This pattern indicates that Khartoum is the least poor, while North Darfur and Warab states are the poorest. While the level of poverty increased, its severity decreased in the period 1978-1980 compared to the period 1967-68. Available evidence suggests that the level and severity of poverty will increase significantly in the 1980s (Farah et al., 1995).

The degradation of natural resources in rural areas of the Third World affects the productive capacity of the land, which in turn threatens food production and livelihoods among rural and urban populations. Since the poor primarily live in rural areas and depend on the land for their livelihood, rural poverty, and land degradation in these areas are considered to be linked together. Despite the significant economic growth that has occurred in developing countries since 1965 AD, extreme poverty has continued to exist.Despite the rise in per capita income, the number of poor people continued to increase. Historical migration movements, especially long-distance ones, have become less feasible with the emergence of populist states and borders. With the rapid increase in population in recent decades, there are few uninhabited areas to move to. There was also demographic pressure on resources, an increase in per capita income, and improved means of transportation and communication, which greatly stimulated internal migration, most of which headed toward urban areas (Bilsborrow, 1992).

There is an effective role for any policy in its impact on poverty and land degradation problems. A comparative study among poor farmers in northern Sudan on gum Arabic revenues in the forest agricultural system revealed the existence of links between poverty and the environment, which is responsible for land degradation. It also confirmed that “good” and “bad” policies can affect the economic incentives that determine the decisions of poor rural families to preserve or degrade their lands (Barbier, 2000).

Poverty is considered a complex phenomenon that is linked to impoverishment in one aspect and to the good situation of individuals in several aspects. Although there are many indicators of effective care that can be used to determine the level of poverty of a population, the most accepted one is based on the consumption factor. In Sudan, about 45.5% of its population lives below the poverty line. There is a significant difference in the poverty rate between rural and urban areas, reaching 26.0% in Khartoum and 69.4% in North Darfur (Ahmed, 2015).It is expected that the trend towards reducing global trade taxes resulting from trade liberalization will negatively affect the government budget in general and spending on education, health, and transfers to poor groups in society in particular, which contributes greatly to the exacerbation of the absolute poverty rate (Mohamed, 2015). The informal trade sector has the potential to contribute to rural economic development by increasing income and reducing rural poverty in the Sinja region in Sudan (Adam et al., 2013).

References:

- Abdelmawla, M.A. .2014. The impact of Zakat and knowledge on poverty alleviation in Sudan: An empirical investigation (1990-2009). J. of economic cooperation and development 35 (4):61-84.

- Adam, Y.O., Davide Pettenella, D. 2013. The contribution of small-scale forestry-based enterprises to the rural economy in the developing world: the case of the informal capacity sector, Sudan. Small-scale forestry 12 (3):461-474.

- Al Mowag, S.M.1983. Tribal systems as obstacles to rural development, a case study of two rural development schemes in Sudan. Unpublished M. Sc. Economics, University of Wales.

- Alavi H. 1982. “India, transition to colonial capitalism”. In: Alavi H, Burns PL, et al: Capitalism and colonial production. Croom Helm. London

- Appalaraju J, Satier H.1976. “Growth center strategies in Less Developed countries”. In: Gilbert A(ed): Development planning and spatial structure. John Wiley and Sons, London

- Arifi, S.1978. Local government and local participation in Sudan. SRC Monograph 10. Khartoum.

- Assal, M.A..2006. Sudan: Identity and conflict over natural resources. Development 49(3):101-105.

- Barbier, E.B. 2000. The economic linkages between rural poverty and land degradation: some evidence from Africa. Agriculture, ecosystems and environment 82 (1-3): 355-370.

- Bascom, J.B.1990. Border pastoralism in eastern Sudan. Geographical Review, 416-430.

- Behnke, R.H.1985. Open-range management and property rights in pastoral Africa: a case of spontaneous range enclosure in South Darfur, Sudan. Pastoral Development, New York, ODI.

- Bilsborrow, R.E.1992. Rural poverty, migration, and the environment in developing countries: three case studies. World Bank Publications, Washington.

- Chambers, R.1981. Rural poverty is unperceived: Problems and remedies. World Development 9 (1):1-19.

- Cox, G.W, Atkins M.D.1979. Agricultural economy, an analysis of World food production system. WH Freeman and Company, San Francisco.

- Farah, A. Z., Sampath, R.K. 1995. Poverty in Sudan. J. of Asian and African Studies 30 (3-4):146-161.

- Friedmann J. 1966. Regional development policy, a case study of Venezuela. Massachusetts Institute of Technology. The M.I.T. Press, London.

- Gertel, J., Rottenberg, R., Calkins, S. 2014. Disrupting territories: Land, commodification, and conflict in Sudan. Boydell and Brewer Ltd.

- Goulet, D.1975. On the ethics of development planning, general principles and spatial application to value conflicts in technology. University of California.

- Green, R.H.1986. Degradation of rural development; development of rural degradation, change and peasant in Sub-Saharan Africa. IDS, 265. Sussex, UK.

- Gunnar, M. S. 1977. Nomads on the scheme: a study of irrigation, agriculture, and pastoralism in Eastern Sudan. In Landuse and development: 132-150.Leiden University. Africabib.org

- Gunnar, M. S. 2010. Local violence and international intervention in Sudan. Review of African political economy 37 (124):173-186.

- Hayami Y, Ruttan V.W.1971. Agricultural development, an international perspective. The John Hopkins Press, Baltimore, and London.

- Ibrahim, F.1978. The problem of desertification in the Republic of Sudan with reference to the northern Darfur province. Khartoum University Press, Khartoum.

- Khogali, M.M.1991. Famine, desertification, and vulnerable populations, the case of Umm Ruwaba district of Kordofan province. AMBIO 20:204-206.

- Kontos, S.1990. Farmers and the future of agribusiness in Sudan. The Middle East Journal, 649-667.

- La- Anyane S. 1985. Economics of agricultural development in Tropical Africa. John Wiley and Sons, London.

- Martin, E.A. 1975. A development plan for semi-arid areas in Western Sudan. Experimental Agriculture 11 (4):277-287.

- McEachern, D.1982. “Colonialism and capitalist production”. In: Alavi H, Burns PL, et al: Capitalism and colonial production. Croom Helm. London.

- Mohamed, H.I., Mohamed, A.A. .2015. Impact of agricultural water management activities on rural poverty alleviation with reference to Gash Scheme, Sudan. Gezira J. of economic and social sciences 6 (1).

- O’Brien, J., .1985. Sowing the seeds of famine: the political economy of food deficits in Sudan. Review of African political economy 12 (33): 23-32.

- Oesterdiekhoff, P., Wohlmuth, k.1980. The breadbasket is empty, and the options of the Sudanese development policy. Research report. German Society for Conflict and Peace. Bonn. (Arabic).

- Reno, W.2003. Economics of war and their transformation: Sudan and the variable impact of natural resources on conflict. Conference paper presented at Money Makes the War Go Around: Transforming the economy of war in Sudan, Brussels, June, 12-13, 2002.

- Robinson, J. 2005. Desertification and disarray: the threats to plant genetic resources of southern Darfur, western Sudan. Plant Genetics Resources 3 (1):3-11.

- Salih, M.A.M.1990. Ecological stress and political coercion in the Sudan. Disasters 14 (2):123-131..

- Suliman, M., Stiftung, E. et al.2005. Ecology, politics, and violent conflict. Sudanese Journal of Human Rights Culture and issues of cultural diversity, issue 1: 1-25.

- Thomas, L.S.1977. The Sudan transport study. Interfaces 8 (1-part 2):37-57.

- Tony B, Abdelkarim, A. 1991. Sudan: The Gezira scheme and agricultural transition. Psychology Press. Amazon.com.

- Wallach, B.1989. Improving traditional grassland agriculture in Sudan. Geographical Review 143-160

- World Bank 1990. Sudan, towards an action plan for food security, simulating growth, and targeting interventions. Report 8167-SU. Agriculture operations division, Eastern Africa Dept. African Region, WB, Washington.

- Yaqoob, A., Ting Zou. 2016. Patterns of economic growth and poverty in Sudan. J. of economic and sustainable development 7(2).

6

Impacts of regional development policies
on agricultural development 1899 - 1993

6

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on agricultural development 1899 - 1993

The cumulative efforts of regional development policies on agricultural development during the both British administration and subsequent national governments were diverse. Agricultural development at the time of British colonialism included general efforts for agricultural expansion, pumping schemes, and the construction of large irrigation schemes focused on the continued development of the Geziera Scheme. The same development trends toward modern irrigated agriculture after independence followed the same geographical pattern of development that colonialism followed, where development was concentrated in the Khartoum Complex and around the Geziera region, with some axes to the east and a few to the west and South Sudan. The traditional rainfed sector did not receive as much from these plans as it did the modern agricultural sector.

British administration policy has resulted in two main patterns (sectors) of agricultural use, namely the traditional pattern (sector) and the modern pattern (sector) irrigated from Nile dams, pumps, or rain in the Gedarief region. As for modern agriculture, Sudanese development plans have shown a clear bias towards it because it uses modern technology and specializes in cash crops, making it the mainstay of the Sudanese economy. These included large schemes that cover thousands of hectares under government supervision and are irrigated comfortably, such as the Gezira Scheme, or with pumps, such as most sugar schemes and the White Nile and Blue Nile agricultural schemes, in addition to a large number of small irrigation schemes that are irrigated by deep wells or with pumps from river water (Figure 1). The devel-

opment of modern agriculture in Sudan took place among a population that had a long and good experience with animal husbandry since ancient times.

The traditional agricultural sector includes the vast majority of traditional farmers in Sudan who produce for survival. There are several types of it, but they are all restricted by the agronomic-dry crop limit (Cox, et al., 1979). There is a full-nomadic style, which is practiced between the two rain lines of 200-400 mm/annual, with the cultivation of few crops, and a semi-nomadic style, with more emphasis on crop production, and is practiced between the two rain lines of 400-600 mm/annual, and there is a semi-nomadic style, as a result of ethnic traditions, and is practiced. Between the 600-1000 mm/annual rain line, there are permanent herd breeders with semi-nomadic emergencies as a result of ethnic traditions. This is practiced at the 1000 mm/annual rainline and is found in South Sudan. All of these species can be included in the shifting cultivation that is distributed throughout Sudan in central Kordofan, southern Kassala, southern Blue Nile, Equatoria Governorate, Bahr El Ghazal, over the clay plain, and to a small extent over the sandy loamy soil west of the former White Nile Governorate, and around the main Nile between... Khartoum and Roseris, the Dinder and Rahad rivers, around the outskirts of villages (towns), the margins of the mud plain in Upper Nile State, Jebel Marra, and the Nuba Mountains.

Figure 1: Agricultural livelihood zones in Sudan

Source: https://reliefweb.int/map/sudan/map-livelihood-zones-sudan-january-2015

Mechanized rain-fed agriculture does not differ from shifting agriculture except in the technology applied and the cultivated area. It is found in the mudflats east of the Blue Nile, the areas around Gedarief, and southern Kordofan State. It produces corn, short-staple cotton, sesame, peanuts, and food for local consumption and also contributes to the Sudanese economy with animal products.

Colonial and post-colonial policies resulted in many changes in the traditional sector since agricultural production in the rain-fed sector is defined as production under risk. This is due to the unreliability of rain and the lack of marketing and storage facilities. Besides that, there are personal risks and business risks. There are also risks associated with a lack of confidence and certainty in production processes, social risks due to the lack of individual communication, and risks associated with ignorance and marketing (Magnusson, 1969). In addition to this, there are risks associated with technical uncertainty, practical risks, and price risks. The rainwater sector suffers from most, if not all, of these risks, with inter-regional and intra-regional differences determined by the distribution of natural resources, historical events, and population change.

The humanitarian and human history of Sub-Saharan Africa during the Six-Year Plan period in Sudan is an evolution and development of poverty and hunger. The crises that occurred at the end of the seventies and early eighties, which were represented by famines, resulted in two types of response, the first of which was structural adjustment and stabilization programs associated with the World Bank and the International Monetary Fund, and the second of which was a direct and extended response to emergency aid for survival (Green, 1986). These programs aimed to increase and change the production structure to achieve the availability of resources and benefit from them, which had a significant impact in various aspects, including the trend towards exporting corn, which became the second source of income from exports in Sudan at a rate of 14% of the total value of exports. It also affected Sudan's ability to produce and purchase wheat, as the rate of self-sufficiency in wheat before implementing these programs averaged 48% and the rate of commercial wheat imports reached 32%, after its implementation it deteriorated to 26% and 21%, respectively. It also affected the total foreign exchange export revenues.

These policies did not improve the cost of living and achieve food security for families, and the deterioration of development activity in Su-

dan in the mid-to-late 1970s led to deep economic crises. In the early eighties, only a few of the development schemes that were proposed were completed, and even the schemes that were completed did not achieve their set goals. The gradual deterioration included all existing agricultural and industrial schemes and was accompanied by the outbreak of war in South Sudan in 1983 AD.

The introduction of the traditional sector into the regulated government marketing system is another change that occurred in Sudan through the Agricultural Bank of Sudan since 1984/5 by buying and selling corn, giving licenses to exporters, subsidizing wheat flour, and distributing grains for free or at subsidized prices (Maxwell, 1991). This is similar to most exchange systems in the semi-arid tropics that act as sinks and attractants for resources (Harris, 1982). The effects of state intervention in the marketing of cereal crops in the African Sahel region are represented by the loss of the license, as "control" over purchasing is only after the harvest, and is characterized by a limited duration and ends in all places when state funding dries up or when mobile phones are not available, forcing farmers with pressing needs to obtain Cash after the harvest season to sell grains at low prices to traders.

Direct sales from individual producers to itinerant urban consumers in a "significantly incomplete market" and the confinement of trade in interregional cereal crops are limited not only by parastatals, but also by local civil administrations. As a result of the lack of approved transport containers and good storage capabilities in Sudan, traders take risks in collecting, classifying, and distributing agricultural commodities, and they are considered the main link between small producers and distant markets. In conclusion, the introduction of the traditional sector into the Sudanese state's marketing system was a kind of transformation rather than a transition to economic development.

Sudanese development plans referred to the restoration of agrarian reform of agricultural lands in rural areas, as it resulted in the presence of individual ownership among farmers, which led to the eradication of elements of duplication and semi-duplication in the end, and led to the

emergence of cooperative associations for farmers that aimed to provide financial dependence, expand crop cultivation, guarantee yields, and provide agricultural inputs. This type of reform is considered unnecessary for economic growth to occur (Sinha, 1976). The cooperative societies of farmers in Sudan failed due to the recent experience in Sudanese society (Sulieman, 1988), and also due to the absence of an elaborate implementation of agricultural reform, and the political influence of most of the old landowners who worked to slow down its implementation, in addition to the lack of financial dependence and the debts of merchants and creditors on small farmers who lost Their lands, after all. Therefore, agricultural reform did not have a positive impact on the traditional sector in Sudan.

Contemporary agricultural policies in Sudan focused on achieving increased grain production by expanding the area of large mechanized rain-fed agriculture only without working to increase the agricultural yield per unit. The total plowed land increased regularly from about 4.5 million hectares in 1961 to 14 million hectares in 1996, with variation from year to year in the area of plowed land and thus the total return. Here a fragile balance emerged between production and actual need, and the unit's revenues decreased regularly and reached a level much lower than its inherited capabilities. This is due to several factors, including loss of soil fertility and fluctuations in rainfall (Ayoub, 1999). One study showed damage to fruits and vegetables at a rate ranging between 30-40% during harvest, transportation, and handling, which adds an increase to the cost of production in addition to its negative effects on marketing and the national economy, especially in circumstances where blame is directed to circumstances.

The introduction of corn cultivation and the expansion of wheat production to achieve self-sufficiency in the economic salvation program 1989-1993, to rescue the Sudanese economy to cover the period 1990-1993 was accompanied by some shortcomings, including ignoring the rainfed sector and focusing more on previously developed areas where the proposed expansion will take place.

The absence of a clear plan to reduce the regional imbalance in development despite the reference to rebuilding South Sudan, and the focus on The major increase in wheat production to meet the growing urban demand without moving towards upgrading the production of most of the foods consumed and wild tree food products and providing opportunities for financially capable citizens in agricultural investment, with the absence of a clear strategy to encourage the poor to produce and invest and taking into account the preservation, protection and rehabilitation of the environment.

The creation of a hybrid between traditional activities and profound change has pushed Bedouin societies to the brink of collapse, as the ancient relationship between humans, animals, and the environment has collapsed (Baker, 1978). It also resulted in the provision of water from deep underground reservoirs and the administration's imposition of peace to reduce war and hunting, as the population numbers increased at a very rapid rate, which led to an increase in demand for the herds of livestock owned by families. These effects occurred within the traditional content of the concept of "insurance" and internal economic-social exchange based on livestock herds and not on money and wealth. The size of herds has increased dramatically in these communities, and this has not been accompanied by migration policies for the sake of marketing, pasture development, and cooperative schemes, which have exacerbated the devastating environmental and social disasters for rural communities in Sudan.

The prioritization of agricultural production is based on the fact that creating the inevitable surplus in agriculture is technically easy and has a short growth or "gestation" period (Dantwalla, 1969).The priority policy for agriculture confirmed Malthus's writings on effective demand. The industrialization policy will also intensify the trend towards attracting savings from the countryside by making urban industrial investment more attractive. Increasing agricultural output per capita will also produce an increased demand for industrial products, will release workers to work in industry, and will make capital available for industri-

al expansion. The Geziera scheme has absorbed 300,000 immigrants to work in it, as have mechanized agricultural schemes. This agricultural expansion was linked to the increasing local demand for its products. It also enabled Sudan to avoid the negative effects of drought in the period 1968-1973. It also protected the rural poor from the risks of food insecurity in the short term, but it led to an economic crisis in the long term. It is clear from this development plan that the lands designated for growing wheat and corn have increased significantly with the focus on the mudflats of central Sudan, and no clear plan has been developed for developing the sufficient rainfed sector. However, development in these areas has provided job opportunities for seasonal migrants from the rainfed sector, especially from Western Sudan.

Higher education developed simultaneously with agricultural and infrastructural development in central Sudan. In 1975, we find that of the 17 universities and higher institutes present in Sudan, 16 of them were located in Khartoum, Geziera, and Gedarief, with one university in South Sudan and a complete absence in Darfur, Kordofan, and the Northern Region. In 1975 AD, trends to decentralize higher education proposed new universities in Darfur, eastern and northern Sudan, but in parallel with these regional universities, other institutions were proposed in central Sudan, including the University of Gezira, the Abu Haraz College of Natural Resources, and the Abu Naa'ma Agricultural Institute.

Macro-economic inadequacy participated in the failure of liberalization and devaluation policies to correct the state's bias toward agricultural exports in Sudan. The provision of community-based animal health services also faces obstacles that include insecurity, poor communication, lack of adequate transportation, simple infrastructure, ease of marketing and trade, limited numbers of veterinarians, and climate extremes (Jones et al., 1998).The industry also suffered from high taxes, the devaluation of the Sudanese pound, and increased levels of foreign currency exchange, so that the agricultural sector could no longer meet the economic requirements of the country, which needs more economic resources, in addition to changing the concepts and appli-

cations of privatization policies (Isam et al., 2011). Good economic performance has been achieved when rates of exchange and harmonization are supported by fiscal and monetary control and few indirect taxes (Hassan et al., 1996).

Long-term economic instability coupled with drought has left women in small villages in western Sudan vulnerable to impoverishment. Increasing drought and government indifference and neglect have pushed poor farmers to rely on local resources and adopt subsistence strategies. Differences were found in living strategies between women and men and between women of different ethnicities and social statuses in the village of Barika. This reflects inequality in agricultural production and social and economic obstacles, which make it difficult for women to succeed in accumulating assets and savings, which are considered primary insurance against the scarce agricultural season. These crises were coupled with a change in the nature of gender relations (Gray, 1993).

Commercial services related to agricultural development developed rapidly in Khartoum, Gezira, and Gedarief. This was facilitated by the modernization of means of communication and roads, as the Sudanese Communications Authority (Sudatel) at the time introduced new methods of communication in Khartoum in 1995 and in most major cities in central Sudan. Few cities in Kordofan and Darfur, at that time, experienced this advantage. Roads were also built to connect Khartoum and the Geziera region with agricultural production areas in other parts of Sudan, such as Khartoum-Kosti-Al-Obeid, Khartoum-Madani-Sinnar-Singa-Al-Damazin, Khartoum-Atbara-Haya-Port Sudan, Khartoum-Madani-Gedarief-Kassala-Port Sudan, in addition to build a road linking El-Obeid-El-Fasher-El-Geneina. This led to an increase in the regional imbalance in development in Sudan.

Ambitious development policies have led to failure due to insufficient planning, lack of cohesion of central planning, and the misplaced use of the term “program,” in addition to weak comprehensive planning, where some aspects were ignored, such as social change and the en-

vironmental load of the proposed type of development, in addition to the influence of external factors such as high oil prices. It also directed development efforts towards multiple large schemes that require financing that exceeds Sudan's financial capacity. The adoption of foreign thought in development led to the alienation of development from local reality. Also, adopting human development within economic growth has proven to be a mistake, as it is possible that the shortcomings in how to develop human resources can be attributed to the inclusion of the term economic only in the formulation of the plan without referring to other competent authorities. On top of all this, the neglect of the traditional agricultural sector has led to inequality in the distribution of wealth in Sudan, as the impact of drought on the areas of the traditional sector has led to the emergence of migration, and the war in South Sudan has taken a significant portion of the budgets allocated to development plans.

References:

- Baker, R.1978. Nomadism in Africa. Development studies 90, University of East Anglia.
- Cox, G.W, Atkins, M.D.1979. Agricultural ecology. Clarendon Press, Oxford.
- Dantwalla, M.L.1969. "Agriculture in a developing economy" In Shukla, T. (ed): Economics of underdeveloped agriculture. Von and Co. Bombay.
- Green, R.H.1986. Degradation of rural development, development of rural degradation, change and peasant in Sub-Saharan Africa. IDS, No. 265, Sussex.
- Harris, B.1982. Agricultural marketing in the semi-arid tropics of West Africa. Occasional paper No. 17. IDS, University of Est Angalia.

- Jones, B., Deemer, T.J Leyland, W, Mogga, E S.1998. Community-based animal health services in southern Sudan: The experience so far. Institutional and policy team, AU.agris.fao. org.

- Magnusson G. 1969. Production under risk. Almqvist and Wiksell Boktryckeri AB, Uppsala, Sweden.

- Maxwell, S. 1991. “Introduction” In: Maxwell S(Ed): To cure all hunger, food policy and food security in Sudan. Intermediate Technology Pub., Short Run Press, London.

- Sinha, R. 1976. Food and poverty, the political economy of confrontation. Croom Helm Briddles, London.

- Sulieman, E.S. 1988. A comparative study of three forms of cooperative schemes in Northern Sudan. Unpublished Ph.D. Thesis, University of Wales.

7

Impacts of climate change in Sudan

7

Impacts of climate change in Sudan

Climate change manifested itself in the indicators of rising temperatures, fluctuations in rainfall, and repeated waves of drought, causing severe impacts on different life forms (Nadeau, et al. 2007; Ye, et al. 2018); and on different regions and social groups (Watson, et al. 1996), and has led to a decrease in natural vegetation, accelerating desertification, environmental degradation and loss of biodiversity (Wang, et al. 2017) as changes in vegetation structure and land cover (Klein, et al. 2007), especially in dry regions (Yu, et al. 2018, Xie, et al. 2016). There is evidence that warming during the twentieth century has been faster than shifts in species ranges (Houghton, 1990), potentially leading to widespread loss of biodiversity.

Drought areas in East Africa are expected to increase by 16%, 36%, and 54% under Representative Concentration Pathways (RCPs) and by 2.6, 4.5, and 8.5, respectively by the end of the twenty-first century (Gebremedhin et al. 2020). Also, since the end of the 1960s, the West African Sahel region (10-18 degrees north) has witnessed a continuous and often severe drought, and it is considered among the most extensive climate changes on a regional level and unquestioned over the last half-century (Bell et al 2006). Sudan as part of both these regions is not exceptional, and is considered the most vulnerable (Gebremedhin et al. 2020) as the observed climate change in Sudan has exacerbated drought conditions (Elagib et al. 2000). The interaction of endemic poverty, and environmental systems deterioration, complex disasters, conflicts, and the limited availability of capital, markets, infrastructure, and technology are essential to exacerbate climate change impacts in Sudan (Zakieldeen, 2009). Also, the key aspects of the vulnerability of Sudan's savanna range to drought including environmental fragility, institutional weakness, high levels of poverty and food insecurity, and economic and political instability, all of which have

been exacerbated by climate change (Callo-Concha et al. 2013). Rapid population growth and the expansion of agriculture and nomadism under a changing climate budget could dramatically increase the number of "at-risk" citizens in Sudan in the next 20 years (Funk et al. 2011).

Most of Sudan's territory is located within the arid and semi-arid regions of tropical Africa, where the humid part lost most of its area after the secession of South Sudan in 2011 AD. These arid and semi-arid regions are characterized by climatic characteristics, the most important of which is the fluctuation and irregularity of rainfall amounts during the rainy season, with high average seasonal temperatures and annual evaporation rates. The global climate has witnessed clear climatic changes in recent decades as a result of many reasons related to industrial progress and population increase, which has had a negative impact on many parts of the world, including the areas in which Sudan is geographically located. There is much scientific evidence confirming the occurrence of climate change in Sudan and the consequent environmental impacts.

Tropical Africa, which includes Sudan, has witnessed climatic changes confirmed by radiocarbon dating and analysis of micro-fossil plants of tropical lake sediments. The early Holocene was wetter than it is today across the entire tropical region, in contrast to the last glacial maximum, which was cold, dry, and windy. Evidence has been found of wetter conditions on the Red Sea Hills at that time compared to today, and this also applies to most of North Africa (Mawson, et al., 1984). Records in eastern desert lakes show that early Holocene oscillations affected the water levels and salinity of the hydrological systems of these isolated lakes as much as they were isolated from larger groundwater systems (Hoelzmann et al. 2010). In the Mansurab Valley, which is 15 km west of the lower White Nile, and which lies within the dry range of present-day north-western Sudan, semi-aquatic shells have been found in the silt and clay of the shallow depression (Williams et al. 2011). This is linked to the early Holocene, which confirms that the climate was humid with a strong indication in this part of Sudan. This

also matches shells found east of the lower White Nile. These results confirm that wetter regional conditions were associated with times of high Nile flow in the early Holocene (Williams et al. 2011).

Historical fluctuations in precipitation occurred over the Nile Basin, which was reflected in its drainage, as precipitation zones migrated latitudinally over the Middle Nile by about 600 km during the past 20,000 years. Decadal changes in precipitation occurred during the twentieth century and reached 20% of the changes that occurred in the Holocene. This reflects the sensitivity of the Nile Basin to many factors operating at different times as well as spatial dimensions that include changes in the Earth's orbit, global ocean temperature anomalies, ITCZ migration, and land cover changes across the African continent (Hulme, 1994).

The swamps of South Sudan (Sudd) work to change the local energy budget by increasing the flow of latent surface heat. Their presence leads to a lower ground temperature (up to 2 degrees Celsius), a large thermal gradient extending from north to south, and an increase in the local rainfall rate (Up to 40%). Particularly important is its effect on rainfall in neighboring regions. Such effects were not found mostly on rainfall over the source region of the Nile in Ethiopia or in the Sahel region, but they are appropriate for the humid conditions over central Sudan (up to 15%) compared to the conditions of bare desert soil (Modathir et al. 2013).

The Sudanese Sahel region is characterized by being an arid to semi-arid region. It relies on seasonal rains as the primary source of water, and its rains have inter-annual variability, as rain fluctuations are linked to the moisture transfer process. The main origins of most of the air masses that reach this region during the monsoon period are over the Arabian Peninsula and Central Africa (not the country), or they are linked to the eastern tropical jet. The flows associated with the movement of the ITCZ contribute half of the amount of water falling into it, most of which comes from Central Africa. This suggests that moisture recycling is the main contributor compared to oceanic sources. Flows

from the northeast (the Arabian Peninsula and northern Asia) and the east (the Horn of Africa and the northern Indian Ocean) contribute about a third of the falling water. The remaining waterfall comes from the Mediterranean Sea and the West Coast with smaller contributions, and the different sub-regions of the Sudanese Sahel have different sources of moisture (Salih, et al. 2015).

There is a significant increase in temperatures over the whole of Sudan, with a significant decrease in rainfall rates in the northern half of it. The correlation between temperatures and irregular rainfall confirms the frequent occurrence of droughts. In contrast to the assumption of a return to drought that lasted for a long period in the African Sahel region, the results for Sudan indicate a high level of drought. The frequency of occurrence of drought categories during the period 1975-2008 ranged from 44.1% - 70.6%, compared to frequencies that ranged between 8.8% - 40.0% for the period 1941-1974 (Elagib, et al. 2011). Climatic data for Sudan for a period of 30-50 years show an increase in temperature and a decrease in rainfall. It also confirms a change in the pattern of relative humidity, clouds, radiation, and evaporation, a trend that may accelerate environmental degradation and desertification in Sudan (Alvi, 1994).

Annual trends in average temperature during the period from 1950 to 2020 in Sudan show peaks of increase during each decade, and there is fluctuation in annual average temperatures during each decade of this time period (Figure 1). Likewise, important decadal trends appear during this period 1950 -2020, divided into three decades, increases in average temperatures (Figure 1). This is confirmed by the observed and expected temperature increase for the period 1960-2039 (Figure 2), which ranged between less than 0.5 and 1.3 degrees Celsius. Before that, since the 1940s, there was an increase in annual temperatures and wet season by 0.076-0.20 and 0.082-0.29 degrees Celsius/decade (Elagib, et al. 2000). The period of greatest warmth in Sudan appears to be linked to the

dissipation of rain that was recorded after the mid-1960s. A general increase in the coefficient of variation of monthly temperatures during the year was also observed, which is more significant in the northern and central locations of Sudan (Elagib, et al. (2000).

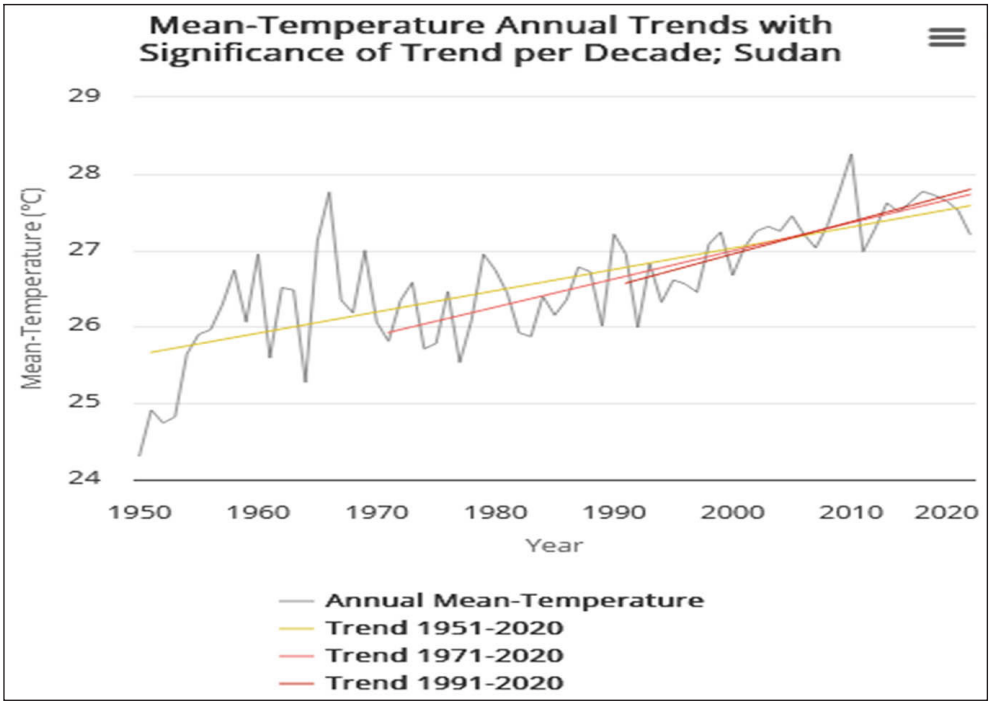

Figure 1: Annual trends in mean temperature with a significant decadal trend in Sudan 1950-2020

Source: https://climateknowledgeportal.worldbank.org/country/sudan/trends-variability-historical

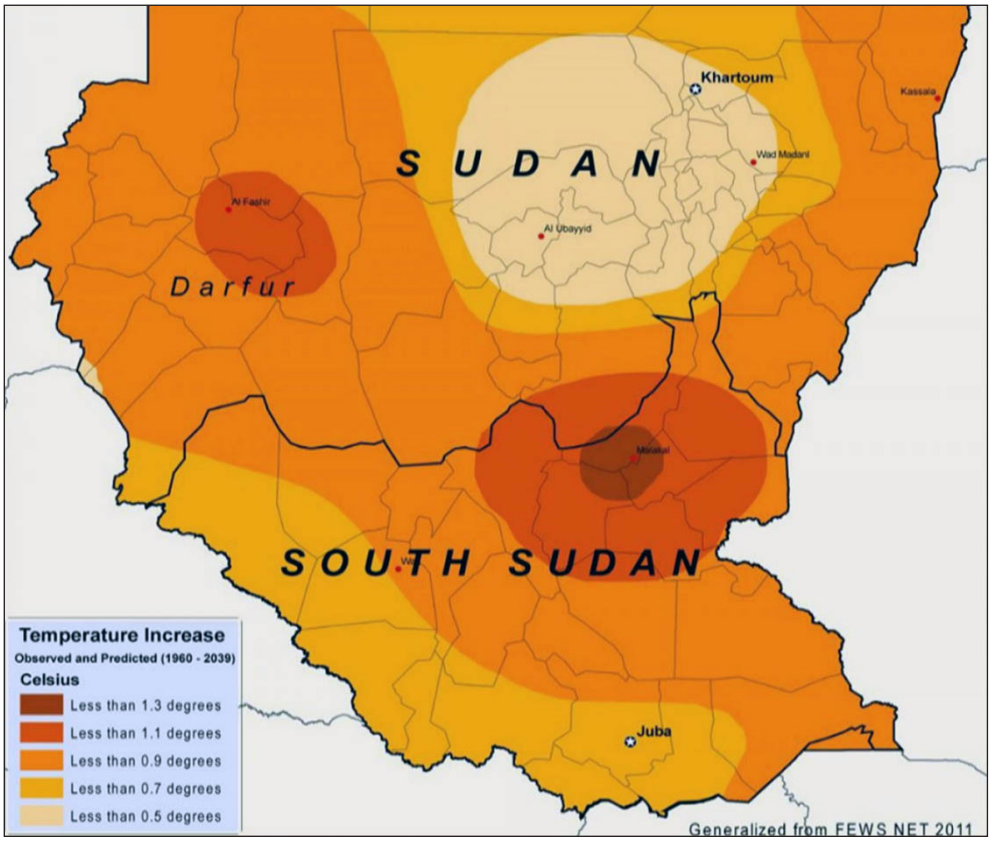

Figure 2: Observed and expected increase in temperature on the Celsius scale from 1960-2039 in Sudan

Source: UNFCCC

Studies on climate change and land use/land cover along seasonal migration corridors for livestock in the Gedarief region in eastern Sudan have confirmed a degree of significant warming. There is an increase in irregularity and seasonality of rainfall, and increased drought conditions during the beginning and end of the wet season (Sulieman et al. 2012). Evapotranspiration over the Sudan responds more to heating and drought conditions, as it showed increasing rates, especially during the rainy season. It appears that the extent of the increase has decreased with the decrease in the period of sunshine, solar radiation, and the irregular behavior of wind speed. There have also been changes in the observations of monthly fluctuation during the year,

which suggests an increase in the incidence of extremism (Elagib, et al. 2000).

Ayoub (1999) compared rainfall for a long period of time in four sub-regions in Sudan, where it became clear that the decrease in rainfall amounted to 30-40%. The parts of western Sudan (Kordofan and Darfur) witnessed very large anomalies in rainfall compared to the central and eastern parts (Gedarief, Butana, and Damazin), and they suffered from great periods of intermittency compared to the eastern and central parts. The decadal rainfall averages showed lower than the average rainfall for the last three decades in these four sub-regions. Rain depletion was also characterized more severely in central, semi-arid Sudan, in the period 1921-1950 and 1956-1985 when the annual rainfall rate decreased by 15%, and there was a contraction in the length of the rainy season by three weeks, and the rain zones migrated towards the south by about 50 and 100 km. This is due more to the low frequency of rain events than to the low rainfall productivity associated with each “rain event” (Hulme, 1990).

The annual time series south of 16°N mostly follows the rainy season time series, with the exception of the zone north of it that shows a real change in the temperature time series. There are clear rising trends in the time series of wetness and hot seasons in the rest of the country, and their trends are characterized by rising. The periods 1941-1970 and 1951-1980 were also distinguished by their significant difference from the periods 1961-1990, 1971-2000, and 1981-2010, as they were the wettest. This was evidenced by the indicators of the beginning of a new increase in rainfall in the period 1981-2010 (Mohamed, 2018). Summer rains have decreased in western and southern Sudan by 10-20% since the mid-seventies, with the observed heating exceedingly only one degree Celsius, which is equivalent to (10-20%) (Mohamed, 2018).

It is likely that the temperature and wetness rates will rise over the Dinder River, which is sensitive to these two climate factors that are likely to rise in this century (Basheer et al. 2016). By so, the climate

above it will become hotter and wetter and its expected flow will become very sensitive to changes in rain and temperature. It is expected to increase so that it positively affects the ecosystem of the Dinder River Park and not just the river. This may improve the process of ecological restoration of plant and animal habitats in it (Basheer et al. 2016). Similarly, the archive of satellite and aerial images of western Sudan has shown short-term trends during the period 1943-1994 in tree abundance despite many decades of drought in the region. Despite the return of plant population turnover, this is not yet considered an indicator of recent climate changes in this region (Schlesinger et al. 1996).

Various early studies predicted the decline of vegetation in most areas of Sudan (Stebbing, 1972). In western Sudan, Acacia "Hashab" trees grow as part of the agro-pastoral system, which has been able to resist for hundreds of years in Kordofan Governorate, where 70% of gum Arabic is produced. Gum Arabic production in Sudan deteriorated sharply after the long drought that extended from 1979 to1985, as many trees were lost due to drought and pests. Farmers report that the deterioration in gum Arabic production is largely due to the "unfavorable" nature of social-economic relations, the role of which drought exacerbated and led to the deterioration of the production of the agricultural-forestry system. The inability to obtain a fair price at the local level and an overemphasis on cash economics to ignore the components of the "tree" have resulted in a system in which Gum Arabic gardens have flourished with intensive orchard cultivation by small farmers. The "Hashab" tree disappeared as soon as farmers were no longer able to care for it. Financial and business risks can have serious impacts on farmers' decisions and farm income. Farmers can also be more risk-efficient and obtain higher incomes by adopting more diversified agricultural systems and applying the proposed improved practices (Mustafa, 2006).

The Kordofan region contains diverse forest species (more than 180 species of trees and shrubs), both local and exotic. Threats to these

forests include drought, soil factors, use of fire, grazing, expanding agriculture, illegal logging, lack of awareness about the problems of deforestation, and insufficient forest awareness. Genetic erosion has occurred in most parts of the natural forests in Kordofan (El Tahir et al. 2010). The central region of North Kordofan provides the necessary natural resources for “nomadic” agricultural and pastoral activities. The unjustified use of these resources has led to their degradation and destruction. Desertification also excluded much of the land from production at a time when the population and demand for land were increasing. Environmental damage also included water shortages and the change in the pattern and timing of seasonal rainfall, as collective grazing increased, which led to overgrazing, and increased logging for the purposes of making charcoal and building homes, where women are considered the most affected (Badri et al. 2000).

The decrease in the abundance of herbs in the Port Sudan area in 2020 AD can be attributed to the very high temperatures after 1998 AD (Loh et al. 2020). Similarly, more areas were affected by desertification and desert encroachment in the Abu Zabad locality in western Sudan (Abbas et al., 2018). Despite this, long-term desertification/the return of the growth of natural vegetation cover over time and space in the center of North Kordofan State was estimated and found that desertification during the last 21 years has helped the return of natural vegetation growth in the areas around rural villages (Dawelbait et al. 2012).

Climate change in Sudan has led to the deterioration of the environmental ranges in the period between 1985 - 2020 (Figure 3), as for example, the desert range expanded by more than +11.0%, from 177,308 km2 in 1958 to 314,076 km2 in 2020 (Figure 3), and similarly the rest of the ecological ranges (+6.8% for semi-desert), except for the ranges of upland and wetland plants (Nadir et al. 2016). Various studies indicate the deterioration of about 120 million hectares of land, including 64 million hectares of different soil types to varying degrees (Ayoub, 1998).

There are many applied studies that help explain this deterioration as a result of climate change. In Dar es Salaam locality, North Darfur state, the percentage of crawling sand increased successively by 29% (868 km2), then to 36% (1035 km2), then to 39% (1132 km2) during the period from 1970-2018 (Al-Zubier et al. 2019). In North Kordofan State, the NDVI index for the degree of greenness of vegetation and its relationship to rainfall showed low values in three of the eight seasons under study (Eltom et al. 2019), and the results confirmed that the sand on Khor Abu Habil advanced by 4% in 2000 and 13% in 2020 (Ahmed et al. 2022), and the Blue Nile forests deteriorated in the quality of trees, as many of the species that were prevalent in the past decreased and others disappeared, such as A. seyal vor fistula, and the area of these forests decreased from 14.7% in 1973 to 3.1% in In 2016 out of the total area of the region (Al-Zubier et al. 2020), and in the Ashaad and Setrab regions of the Red Sea State in Sudan, the vegetation area decreased from 192.38 square kilometers to 187.39 square kilometers and then to 148.59 square kilometers between the years 1987, 1999, and 2013, respectively (Al-Zubier et al. 2020), similarly, the Halba region in White Nile State lost 91% of its tree and forest cover, which represented 41% of its area, and the area of natural pastures decreased by 16.55% in the period between 1973-2014 (Wadi et al. 2017). In the Butana area, a peak of natural vegetation was found in the year 1850 AD, which had the ability to carry the natural vegetation, environmental imbalance began in 1970 AD, and the changes occurred during four successive stages, evident in the dynamic deterioration of the vegetation cover, the decrease in rainfall rates, and the decrease in the carrying capacity (Alredaisy et al. 2011), and likewise it became clear that the deterioration of acacia trees (Acacia) in the West Butana region is due to a decrease in annual rainfall rates, among other factors, including agricultural expansion, which contributed by 40% to it (Alredaisy et al. 2011). The instability of climate factors and the change in biological factors have led to the deterioration of soil resources and thus the scarcity of tree products in the Qadmabila area in Gedarief State (Idris et al. 2015).

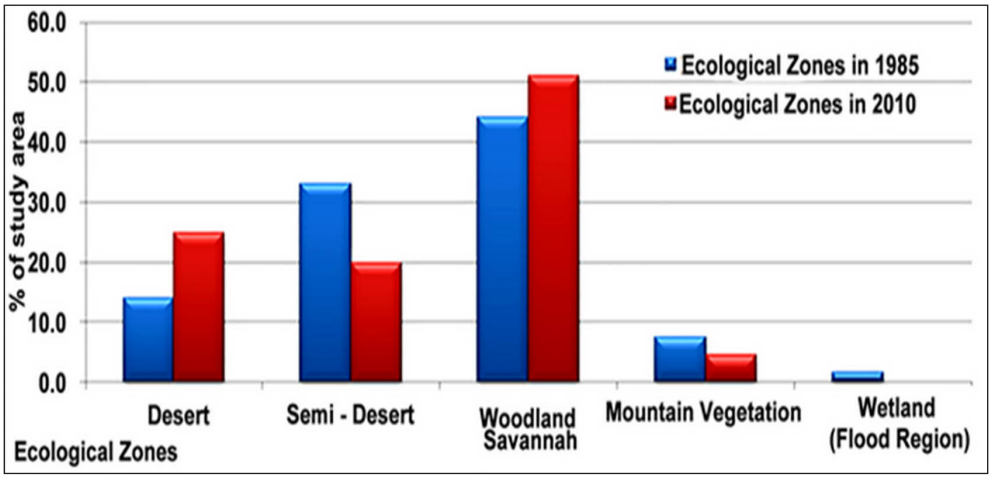

Figure 3: Environmental ranges in 1985 and 2010

Source: Nadir et al. 2016

Land degradation and desertification processes have increased in arid and semi-arid environments in the last four decades (Salih et al. 2017). Land degradation can lead to climate change, as high temperatures, low rainfall, long periods of sunshine, cosmic radiation, and high rates of evaporation-transpiration, especially during the wet season, have been observed, in addition to changes in the oscillation of annual and monthly observations (Elagib et al. 2000). Mechanized agriculture projects in the Gedarief region are considered a major cause of environmental degradation and land loss, in addition to environmental complications such as drought. Forests have turned into agricultural lands, accompanied by unorganized cutting, which is considered the main factor contributing to land degradation in the Gedarief region. In addition, contradictory sectoral policies affect land ownership (Glover et al. 2012). In light of such factors, there is evidence that confirms the consequences of dry farming of lands in the Gedarief region for decades, which led to rapid changes in land use and land cover due to agricultural expansion, government policies, and drought.

The agricultural sector suffers from climate fluctuations. This situation worsened further after the discovery of oil and the focus on investment

and petroleum-related industries (Mahgoub, 2014). The negative impact of the potential climate change falls on food availability and connectivity in Sudan. The most affected are the poor families along with the deterioration in the country's economic performance (Sassi et al. 2013). Climatic change significantly led to changes in the pattern of land use, land cover, and soil physical and chemical properties. These changes contributed to land degradation and low soil productivity (Biro et al. 2013). In Sudan, deep plowing and leveling of the surface soil in rain-fed agricultural areas increased its exposure to wind erosion. This has caused a decline in soil fertility and the formation of sand dunes in some places. The impacts of these practices on the natural resource base have included environmental degradation, food insecurity, and a sharp increase in income inequality among Sudanese producers (Abadi et al. 2013).

There are important changes in climate conditions, soil characteristics, and natural vegetation in the Butana region, as the size distribution of soil particles changed to a high degree, especially in the silt layer, and a slight change occurred in alkalinity - acidity (Meheissi, et al. 2010). The Butana region was affected by the fluctuation of Climate change in renewing its natural resources, including the soil resource, as it is characterized by a "soft" balance between climate and ecosystem, which is what characterizes the Sudanese Sahel region, of which it is a part (Elhag et al. 2009). Likewise, the Gash Delta scheme has been affected by climate fluctuations, on which a large number of ethnic groups rely to live and be self-sufficient, and have different production strategies, some more successful than others. Since the 1980s, a clear deterioration in the irrigation system in this scheme began with a decrease in the areas available for agriculture and a general deterioration in the natural production base, which affected these ethnic groups (Kirby, 2001).

Climate change in Sudan has also caused a shortage of drinking water in its arid and semi-arid parts. It began to take a critical situation in the 1940s of the last century when population density increased around

water sources. Consequently, there were increased concentrations of humans and animals, environmental deterioration, and removal of vegetation. The government adopted a number of ambitious projects to improve rural water sources in Sudan, which differ from one region to another. In dry areas, improving these sources may mean increasing the amount of water, and in less dry areas it means more than just water quality. The imbalance between the amount of water required for healthy living and real consumption is considered the central problem of rural water supply in Sudan (Mohamed et al. 1985).

References:

- Abadi, O.A., Glover,E.K., Luukkanen, O. 2013. Causes and impacts of land degradation and desertification: case study of the Sudan. International journal of agriculture and forestry 3 (2):40-51.
- Abbas, K.I. Zubair, M.A.H. 2018. Climate change and its role in determining the phenomenon of sand encroachment in Abu Zabad locality (Sudan) using geographic information systems and remote sensing technology. Assiut University - Center for Environmental Studies and Research: 51 – 69.
- Ahmed, R.T., Alredaisy, S.M.A. 2022. Quantification of Sand Encroachment on Abu-Habil Valley in the Southern Fringe of the Sahara, Sudan: 2000 – 2020. Gulzum journal for geographical and environmental studies 10: 149-166.
- Al Zubair, M.A.H., Alkhair, S., Hamdan, M.M. Deterioration of Blue Nile forests and its ecological effects in the Gezira State– Sudan. MOJ Ecology & Environmental Sciences 5 (1): 34-40.
- Al- Zubair, M.A.H., Nuri, A.A.F., Ahmed, F.H.T. 2020. Temporal - Spatial Change of the Vegetation Cover in Ashad and Sitrab Regions - Using Remote Sensing and GIS Techniques- Red Sea State. Sudan Annals of Geographical Studies 3 (3): 1-9.

- Alredaisy, S.M.A., Al-Zubair, M.A. H. 2011. Deterioration of Acacia in western Butana plain, Sudan'', Journal of Horticulture and Forestry 3(3): 78-87.
- Alredaisy, S.M.A., Al-Zubair, M.A. H. 2011. Vegetation dynamic in semi-arid Butana, Sudan. Journal of Geography and Regional Planning 4(4):183-198.
- Alvi, S.H. 1994. Climatic changes, desertification, and the Republic of Sudan. GeoJournal 33 (4):393-399.
- Al-Zubair, M.A.H., Karrar, E.B., Burrawdi, A.R.M. 2019. Ecosystem Between (1970-2018) in Dar El Salam Locality- North Darfur State - Sudan International Journal of Science and Research (IJSR). Volume 9 Issue 8, August 2020: 1064- 1070.
- Ayoub, A.T..1998. Extent, severity and causative factors of land degradation in the Sudan. Journal of Arid Environments 38 (3):397-409.
- Ayoub, A.T..1998. Extent, severity and causative factors of land degradation in the Sudan. Journal of Arid Environments 38 (3):397-409.
- Badri, B., Osama, S. 2000. Environmental crisis and its impact on women, the case of Sudan. Women5: 4-7
- Basheer, A.K., Lu, Haishen, et al. 2016. Impacts of climate change under CMIP5RCP scenarios on the stream flow in the Dinder River and ecosystem habitats in Dinder National Park. Hydrology and earth system sciences 20 (4):1331-1353.
- Biro, K., Pradhan,B., Buchroithner, M., Makeschin, F. 2013. Land use/land cover change analysis and its impact on soil properties in the northern part of Gadarif region, Sudan. Land degradation and development 24 (1):90-102.
- Callo-Concha, D., Gaiser, T., et al. 2013. Farming in the West African Sudan savanna: Insights in the context of climate change. African J. of agricultural research 8 (38): 4693-4705.

- Dawelbait,M., Morari, F. 2012. Monitoring desertification in the Savannah region of the Sudan using Landsat images and spectral mixture analysis. Journal of arid environments 80:45-55.
- El Tahir, B.A., Fadl, K.E.M., Doka, A.G. 2010. Forest biodiversity in Kordofan region, Sudan: Effects of climate change, pests, disease and human activity. Biodiversity 11 (3-4):34-44.
- Elagib, N.A., Elhag, M.M. 2011. Major climate indicators of the ongoing drought in Sudan. J. of Hydrology 409 (3-4): 612-625.
- Elagib, N.A., Mansell, M.G. 2000. Climate impacts of environmental degradation in Sudan. GeoJournal 50 (4): 311-327.
- Elagib, N.A., Mansell, M.G. 2000. Climate impacts of environmental degradation in Sudan. GeoJournal 50 (4): 311-327.
- Elhag, M., Walker, S. 2009. Impact of climate vulnerability on vegetative cover in the Butana area of Sudan. African J. of ecology 47:11-16.
- Eltom, I. M., Alzubair, M.A.A. 2019. Assessment of spatial-temporal Vegetation Greenings using NDVI in North Kordofan State, Sudan. International Journal of Latest Research in Humanities and Social Science (IJLRHSS), 2 (9): 01-11
- Funk, C.C., Eilerts, G., et al.2011. A climate trend analysis of Sudan. Fact Sheet 2011-3072. U.S. GeologicalSurvey.
- Gebremedhin, G.H., Tana, O., Mohammed, S. 2020. Projected impacts of climate change on drought patterns over East Africa. Earth's future 8 (7), e 2020ef 001502.
- Glover, E.K., Elsiddih, E.A. 2012. The causes and consequences of environmental changes in Gedaref, Sudan. Land Degradation and Development 23 (4):339-349.
- Hoelzmann, P., Schwalb, P.A., et al. 2010. Hydrological response of an east-Saharan paleo-lake (NW Sudan) to early-Holocene climate. The Holocene 20 (4): 537-549.

- Houghton JT, Jenkins GJ, Epharaums JJ (1990). Policymaking summary. In: Houghton, J. T., G. J. Jenkins and J. J. Epharaums (Eds.) Climate Change, the IPCC Scientific Assessment. (Cambridge: Cambridge University Press).

- Hulme, H. 1990. The changing rainfall resources of Sudan. Transactions of the Institute of British Geographers,21-34.

- Hulme, H. 1994. Global climate change and the Nile Basin. The Nile shares a scarce resource. Cambridge University Press, 139-162

- Idris, A.E.A; Desougi, M.A. 2015. The potential impact of rain-fed-mechanized farming and shelter belts establishments on the environment, case study Ghadambaliya, Gedaref, Sudan. Journal of natural resources and environmental studies 3: 36-43.

- Kirby, J. 2001. Saving the Gash Delta, Sudan. Land degradation and development 12 (3): 225-236.

- Klein, J.A.; Harte, J.; Zhao, X.Q. Experimental warming, not grazing, decreases rangeland quality on the Tibetan Plateau. Ecol. Appl. 2007, 17, 541–557.

- Loh, P.S., Ibrahim, H. et.al. 2020. Impact of climate change on vegetation cover at south Port Sudan area. Climate 8 (10), 114.

- Mawson, R.I., Williams, M.A.J. 1984. A wetter climate in eastern Sudan 2,000 years ago?. Nature 308 (5963):49-51

- Meheissi, B.M., El-Mobark, E.A. 2010. Study major features of land degradation in Butana of the Gezira State, Sudan. Sudan Journal of Agricultural Research.agris-fao.org

- Modathir, A.H., Zaroug, M.B., et al.2013. A sensitivity study on the role of the swamps of southern Sudan in the summer climate of North Africa using a regional climate model. Theoretical and applied climatology 113 (1-2):63-81

- Mohamed, H.A. 2018. Sudan rainfall trends: A reversible drop or a part of a persistent climate change. Sudan J. of Desertification Research 5 (1)

- Mohamed, Y.A., Abusin, M.E. 1985. Rural population and water supplies in the Sudan. Population and development projects in Africa, 254. International Geographical Union. Commission on Population Geography. Cambridge University Press.

- Mustafa, R.H., 2006. Risk management in the rain-fed sector of Sudan: case study, Gedaref area Eastern Sudan. Margraf. d-nb. info

- Nadeau, C.P.; Urban, M.C.; Bridle, J.R. Climates Past, Present, and Yet-to-Come Shape Climate Change Vulnerabilities. Trends Ecol. Evol. 2007, 32, 786–800.

- Nadir A. Hameid Mohamed, A. Bannari, Hassan Mohamed Fadul, Sumia Zakieldeen. Ecological Zones Degradation Analysis in Central Sudan during a Half Century Using Remote Sensing and GIS. Advances in Remote Sensing.5 (4), 2016.

- Salih, A.A.M., Ganawa, E.T., Elmahal, A.A. 2017. Spectral mixture analysis and change vector analysis for monitoring and mapping land degradation/desertification in arid and semi-arid areas (Sudan) using Land imagery. The Egyptian Journal of Remote Sensing and Space Science 20 (1): S21-S29.

- Salih, A.A.M., Zhang, Q., Tjernstrom, M. 2015. Lagrangian tracing of Sahelian Sudan moisture sources. J. of Geophysical Research: Atmosphere 120 (14):6793-6808.

- Sassi, M., Cardaci, A. 2013. Impact of rainfall pattern on cereal market and food security in Sudan: Stochastic approach and CGE model. Food Policy 43:321-331.

- Stebbing EP (1972). The creeping desert in the Sudan and elsewhere in Africa. Forest Department. Khartoum. Sudan.

- Sulieman, H.M., Elagib, N.A. 2012. Implications of climate, land-use and land–cover changes for pastoralism in eastern Sudan. J. of Arid Environments 85:132-141.

- Wang F, Zhao Z (1995). The impact of climate change on natural vegetation in China and its implications for agriculture. J. Biogeogr., 22: 657-664.

- Watson, R.T.; Zinyowera, M.C.; Moss, R.H.; Dokken, D.J. Climate Change 1995. Impacts, Adaptions and Mitigation of Climate Change: Scientific-Technical Analyses. Contribution of Working Group II to the Second Assessment Report of the Intergovernmental Panel on Climate Change; Cambridge University Press: Cambridge, UK, 1996; pp. 1–879.

- Williams, M., Jacobsen, G. 2011. A wetter climate in the desert of northern Sudan 9900-6700 years ago. Pyramids SNC. agris.fao.org.

- Xie, Z.Y.; Huete, A.; Ma, X.L.; Restrepo-Coupe, N.; Devadas, R.; Clarke, K.; Lewis, M. 2016. Landsat and GRACE observations of arid wetland dynamics in a dryland river system under multi-decadal hydroclimatic extremes. Journal of Hydrology 2016, 543, 818–831.

- Ye, X.P.; Yu, C.Q.; Taybazhaer, A.; Xu, F.J.; Skidmore, A.K.; Wang, J.J. Impacts of future climate and land cover changes on threatened mammals in the semi-arid Chinese Altai Mountains. Sci. Total Environ. 2018, 612, 775–787.

- Zakieldeen, S.A. 2009. Adaptation to climate change: A vulnerability assessment for Sudan. Gatekeeper series/ International Institute for Environmental and Development, Sustainable Agriculture and Rural Livelihoods Program; 142.

8

The Formation of Sudan's Geographical Map

8

The Formation of Sudan's Geographical Map

Sudan witnessed many successive governments, so its geographical map took different shapes. Sudan was the largest Arab and African country in the area and had a distinctive map since 1956 after the departure of British colonialism. Its shape has now changed after a third of its area was cut off following the secession of South Sudan in 2011. The nature of the ideological thought of the ruling authority at the time of this secession had a clear role in this, but it cannot be said that this is the only factor, but rather it is a product of the influence of the ideology of previous regimes that ruled Sudan in different periods of time.

Sudan is a geographical term created by Muslim travelers. They applied it to the region inhabited by black-skinned tribes, which they called the country of Sudan.It was divided into eastern, central, and western Sudan. Eastern Sudan includes most of today's Sudan, while Central Sudan includes the kingdoms of Darfur and Wadai. Western Sudan includes the region extending beyond them to the Atlantic Ocean.

There was no unified political entity in Sudan before the invasion by Muhammad Ali Pasha, the governor of Egypt in 1821 AD. It was conquered and unified at various stages, however, its parts were carved out by colonial countries and added to other countries (Al-Qaddal, 2002). Therefore, the map of Sudan is a product of the dynamism of history and geography linked to the ambitions of geographical discoveries, modern European colonial expansion, and the nature of the ideological thought of successive ruling regimes.

The political history of Sudan has been characterized by forms of conflict that affected its geographical and political unit. Its geographical

map swung right and left towards expansion or contraction, unity or separation. Once South Sudan separated, the Nuba Mountains and Anqasna regions sought secession. They were enclosed areas created by British colonialism based on racial ideological thought.

Sudan, like many African countries, inherited borders drawn by the conflicting colonial powers during their "scramble for Africa" in the last two decades of the nineteenth century. As the maps show, the borders of independent countries run across major ethnic borders instead of including homogeneous ethnic groups (Davies, 1970). The last 59 years of the nineteenth century witnessed the transition from "official imperialism" to military influence and economic sovereignty instead of direct colonial rule (Shillington, 2005), This helped to escalate inherited problems between African countries and between the disparate ethnicities within the country itself.

Many countries seek to achieve their political unity by creating forms of governance and political administration systems. They take into account the specificity of their constituent regions, specifically whether these regions are characterized by ethnic or religious specificity, or differ in levels of spatial development. Therefore, the federal state, the confederation, and others were created. The federal state is a political entity consisting of a union of states with partial autonomy, or of regions united by a central (federal) government. In the federal state, the status of self-government of the constituent states, as well as the division of power between them and the central government, has been well established by the constitution and is not changed by any individual decision or independent of the other. The federal state may have a multi-ethnic composition, covering large areas of geographical borders such as India, although it is not necessary for this to be in all cases (Wikipedia, 2012).

The confederal state has a union of independent states that exist under a central government with very limited authority, and the states have supreme authority over all matters, except those that have been clearly abandoned to the central government (Wiki.Answers.com. 2012). In

contemporary political terminology, confederation means a permanent union of political units that occurs, firstly, through a treaty, and secondly, by adopting a general constitution. In most cases, these countries embrace local or imported philosophical principles to achieve political cohesion in their regions.

Throughout the political history of human societies, there has been a belief (ideology) that guides and directs governance. Ideology is defined as a set of ideas that constitute the totality of an individual's goals, hopes, and actions. Ideology can be interpreted as a comprehensive vision, or as a way of looking at things as they exist in various philosophical trends such as political ideologies, or as a set of ideas proposed by the dominant class of society to all its members as a future awareness, or a product of social normalization. The main goal of ideology is to bring about change in society or to provide loyalty and obedience to a set of ideas wherever there is agreement about them.

Ideologies are systems of abstract thinking that are applied to public affairs, making them the center of policy. This belief may be a religious belief, or a positive belief, such that the state takes it as a guide in managing its affairs at various levels. In most cases, an ideology prevails that runs the state and may seek to spread beyond the political borders of that state. An example of this is the Marxist (communist) ideology that prevailed in many countries, which was a method of questioning and economic-social analysis centered on the materialistic interpretation of history, and adopting a dialectical point of view on social change and analysis and criticism of capitalist development (Britannica Online Encyclopedia, 2012). As for imperialism, it is a policy that expands the power of a people through the acquisition of new lands and borders, or through economic and political control over other peoples (Britannica Online Encyclopedia, 2012). In Sunni Islamic thought, the idea of Mahadism is based on the appearance of a restorer of the faith who will appear at the end of time to return justice and establish global Islam.

Some contemporary political systems have been associated with the

idea of fundamentalism, which is the demand for loyalty and obedience to specific religious restrictions and laws. It is usually understood as a reaction against modern religious ideas and beliefs and seeks in principle continuity and to promote honesty and truth (Marsden, 1980). Among the doctrines that have influenced the history of the contemporary world is the Nazi doctrine based on the superiority of the Aryan race over other races and its right to rule the world, as well as the Zionist doctrine that established the State of Israel.

1. The historical development of the geographical map of Sudan

The Kingdom of Kush (about 2200 BC) is considered the first Sudanese state (Al-Amin, 2003). The Second Kingdom of Kush, or Meroe, also arose (about 900 BC - 350 BC), and its influence extended to the northern region of Sudan, east to Butana, west to North Kordofan, and up to the outskirts of Wadi Howar in Darfur, and south to Khartoum and the White Nile (Al-Kawa), and towards the southeastas far as Mount Moya in the Blue Nile region (Khabier, 2012). The Meroitic civilization also flourished (about 300 BC to 350 AD). Later. it disintegrated and Nubatia kingdom remained, whose rulers converted to Christianity in 580AD, and then it fell down. In 1323 AD, in the tenth century AD, Sudan was divided into the Daju Kingdom in Darfur, with its capital at Jebel Marra, then Umm Kardos, and the Kingdom of Magara in the north, with its capital at Dongola, the Kingdom of Alwa on the Blue Nile, with its capital at Soba, and the Kingdom of Beja in eastern Sudan, with its capital at Hegar.

By the end of the fifteenth century, the Kingdom of Alwa disintegrated as a result of successive Arab migrations to Sudan, and the door was opened for Arabs and Arabism to establish Islamic kingdoms and sultanates (Al-Amin, 2003), such as the kingdoms of the Funj, Fur, and Taqli. The country ruled by these three kingdoms included the greater part of the territory that today includes the modern Republic of Sudan. The Kingdom of Funj (1505-1820 AD) extended in its heyday to the Third Cataract in the north, Fazoghli in the south, to the borders of the Sultanate of Darfur in the west, and the Red Sea coast in the east,

except for Suakin, which was seized by the Ottoman Turks after their conquest of Egypt in the year 1517. As for the Sultanate of Fur (1637-1875 AD).) it included Darfur and Kordofan (Figure 1). The Kingdom of Taqali (about 1570 AD until the end of the nineteenth century) was established in the northeastern part of the Nuba Mountains and extended between Talodi in the south and Abu Habil in the north. As for t These Islamic kingdoms were unable to influence all the regions of Sudan, as they were a loose union that included dozens of sheikhdoms ruled by tribal leaders. he Funj Kingdom, which ruled for about three hundred years, some regions of present-day Sudan with their population remained outside its influence. These Islamic kingdoms were unable to influence all the regions of Sudan, as they were a loose union that included dozens of sheikhdoms ruled by tribal leaders.

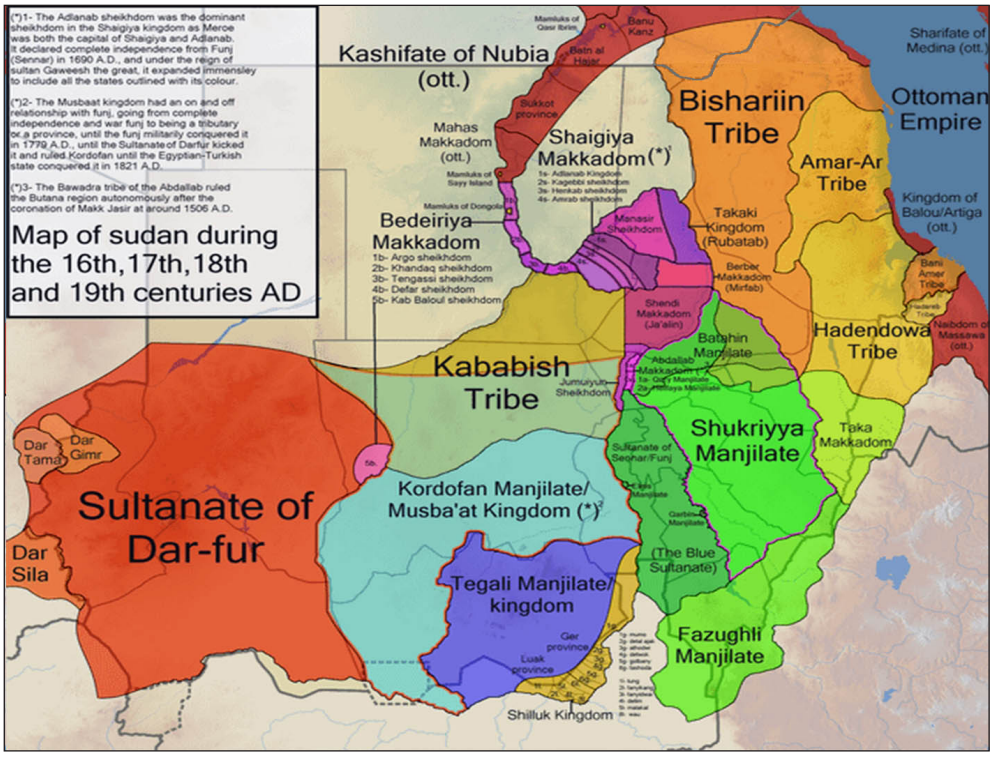
(*)1- The Adlanab sheikhdom was the dominant sheikhdom in the Shaigiya kingdom as Meroe was both the capital of Shaigiya and Adlanab. It declared complete independence from Funj (Sennar) in 1690 A.D., and under the reign of sultan Gaweesh the great, it expanded immensley to include all the states outlined with its colour.
(*)2- The Musbaat kingdom had an on and off relationship with funj, going from complete independence and war funj to being a tibutary or a province, until the funj militarily conquered it in 1779 A.D., until the Sultanate of Darfur kicked it and ruled Kordofan until the Egyptian-Turkish state conquered it in 1821 A.D.
(*)3- The Bawadra tribe of the Abdallab ruled the Butana region autonomously after the coronation of Makk Jasir at around 1506 A.D.
Map of sudan during the 16th,17th,18th and 19th centuries AD
Kashifate of Nubia (ott.)
Mamluks of Qasr Ibrim
Banu Kanz
Batn al Hajar
Sukkot province
Mahas Makkadom (ott.)
Shaigiya Makkadom (*)
1s- Adlanab Kingdom
2s- Kagebbi sheikhdom
3s- Henkab sheikhdom
4s- Amrab sheikhdom
Mamluks of Sayy Island
Mamluks of Dongola
Bedeiriya Makkadom
1b- Argo sheikhdom
2b- Khandaq sheikhdom
3b- Tengassi sheikhdom
4b- Defar sheikhdom
5b- Kab Baloul sheikhdom
Manassir Sheikhdom
Takaki Kingdom (Rubatab)
Berber Makkadom (Mirfab)
Shendi Makkadom (Ja'alin)
Batahin Manjilate
Abdallab Makkadom (*)
1a- Qarry Manjilate
2a- Hellaya Manjilate
Jumuiyun Sheikhdom
Kababish Tribe
Bishariin Tribe
Amar-Ar Tribe
Sharifate of Medina (ott.)
Ottoman Empire
Kingdom of Balou/Artiga (ott.)
Bani Amer Tribe
Hadendowa Tribe
Nabdom of Massawa (ott.)
Shukriyya Manjilate
Taka Makkadom
Sultanate of Seohar/Funj
Dar Tama
Dar Gimr
Sultanate of Dar-fur
Dar Sila
Kordofan Manjilate/ Musba'at Kingdom (*)
Darfur Manjilate
Garbaya Manjilate
(The Blue Sultanate)
Tegali Manjilate/ kingdom
Ger province
Luak province
Fazughli Manjilate
Shilluk Kingdom

Figure 1: Kingdoms and tribes of Bilad el Sudan (Before Turco-Egyptian rule)
https://www.google.com/search?q=maps+of+sudan+in+mahadist+state&tbm

The era of Islamic kingdoms in Sudan ended with the establishment of Egyptian-Turkish rule 1821 – 1885. Starting in September 1820, Muhammad Ali Pasha's army swept the areas of Dongola, the Shayqia, the Ja'alien, then Omdurman, and crossed the White Nile to the Geziera region, where Sennar fell in June 1821, then Fazoghli in January 1822. By so, annexing all the lands of the Funj state. The Turks annexed Kordofan in 1822, but they were unable to extend their influence over the Nuba Mountains. The expansion began in the eastern border regions, and it annexed Al-Qalabat in 1838, and the Taka (Kassala) region in 1840, then Suakin and Massawa, which had belonged to the Ottoman Empire since 1550, and were annexed by Khedive Ismail (1863-1879) to Sudan.

In 1843, Sudan was divided into six governorates, independent of each other and affiliated directly to Cairo, namely Dongola (extending to Al-Matma in the south), the Upper Districts (including Shendi, Khartoum, the White Nile, Geziera to Wad Madani, and the eastern sections of the Blue Nile), Sennar (starting from the south of Wad Madani to the Fazoghli border, and including Gedarief and Qalabat), and Fazoghli, Taka, and Kordofan governorates.

The movement of geographical expansion during the period of Turkish-Egyptian rule continued southward, annexing Bahr al-Ghazal in 1872, and reaching the equatorial region in the Lakes region in the period between 1869 - 1873. Then it expanded westward and annexed Darfur in 1874, and then expanded eastward t along the Red Sea coast to the port of Zeila, then Berbera, andHarar in Ethiopia. Thus, the Egyptian Empire extended from Halfa in the north to Jinja in the Lakes in the south, and from Wadai in the west to Zeila, and Harar in the east.

England set a treaty on September 7, 1877, with Egypt under which it recognized the extension of Sudan eastward to the Red Sea, westward to Darfur, and southward to Uganda. Then Egypt decided to define the features of Sudan and record them on the world map, where some maps appeared showing the areas from

Dongola to El Fasher, and from El Fasher to El Obeid. It also prepared maps for Kordofan and Darfur, and drew other maps for the Nile River, showing the white and Blue Nile. These works culminated in the drawing of two maps, one of which shows the sources of the Nile and the rivers that flow into it, and the other shows the eastern coast of Sudan on the Red Sea with its neighboring Kassala.

The Europeans recognized these maps, and that Sudan extends from north to south with a length of 1,950 miles and a width ranging from 1,200 to 1,409 miles from Egypt to the west of Darfur. Based on these maps, the borders of Sudan begin from Pyrenees Point on the Red Sea coast to the east, then extend into the Libyan desert until the 22nd meridian, and from there the border line heads south with an inclination towards the west until the northwestern corner of Darfur at a point located about 23 degrees from the longitude, then it turns in a straight line towards the south to the eleventh or twelfth degree, then it goes south-east across Lake Nyanza until it touches the entrance to Victoria Nyanza, and from there it ascends north to the east and includes the Haor region.

Sudan was divided into four governorates in 1881. They includedthe governorate of central Sudan (including Khartoum, Sennar, Berber, Fashoda, and the Equator, with Khartoum as its center), the governorate of the western Sudan region (including Kordofan, Darfur, Shekka, Bahr al-Ghazal, and Mangala, with its capital El Fasher), and the governorate of the eastern region(including Taka, Suakin, and Massawa), and the governorship of Harar, Zeila, and Berbera (Figure 2).

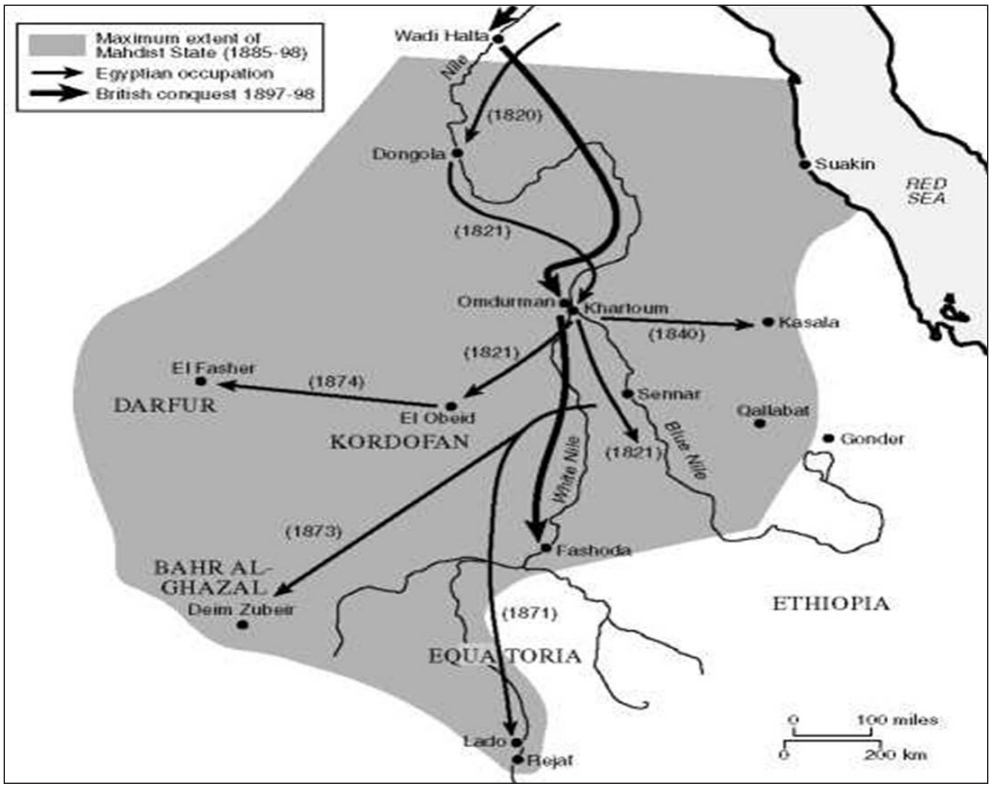

Figure 2: Turco-Egyptian Sudan 1820-1885

https://www.google.com/search?q=maps+of+sudan+in+mahadist+state&tbm

The Turkish-Egyptian rule in Sudan ended with the Mahadist Revolution in 1881, which inherited a vast state. Al-Mahadi wanted to spread the teachings of his call outside Sudan, so his successor sent armies in an attempt to invade Egypt and Ethiopia, but all of them were unsuccessful. As a result of global political changes and the mad colonial race during the Mahadist period (1881-1898), the map of Sudan began to lose some of its parts. In 1892, the Belgians occupied the Western Equatoria region up to Mangala, and established the Lado region as part of the Belgian Congo. During the same year the French occupied large parts of Bahr el-Ghazal and western Upper Nile up to Fashoda, and by 1896 had established a strong administration in these areas. In 1897, the French campaign moving from Djibouti via Ethiopia failed to connect with the Fashoda campaign. With these movements, the French wanted to connect South Sudan with the French colonies

In West Africa, leading to an international conflict between the British and French over South Sudan known as the Fashoda Question. By the end of the Mahadist period, the map of Sudan took the form shown in (Figure 3).

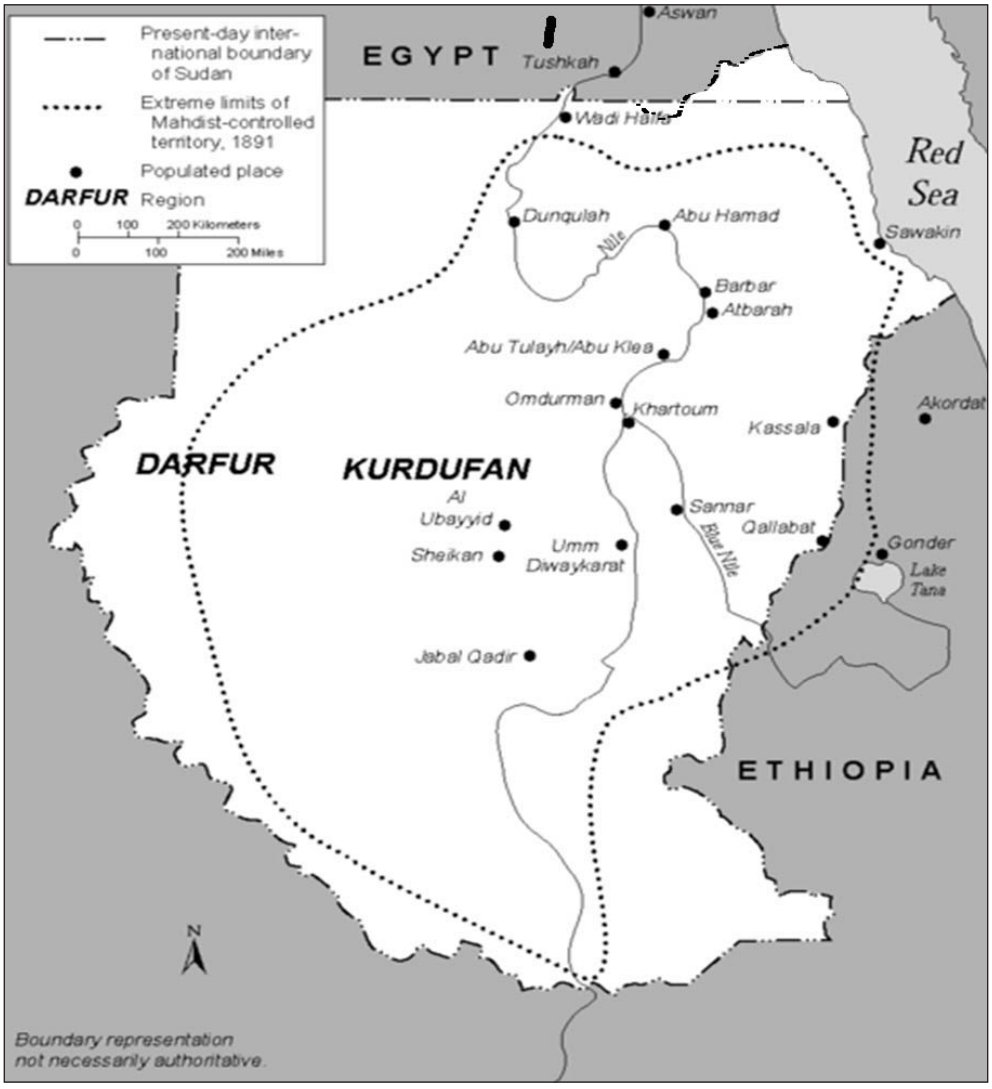

Figure: Mahadia State in Sudan

Source: https://www.google.com/search?q=maps+of+sudan+in+mahadist+state&tbm

The era of the Mahadist revolution ended when the British and Egyptians occupied Sudan in 1898, and a dual rule agreement was signed to rule

Sudan within its borders before 2011. The British and French concluded an agreement that expelled the French from southern Sudan, handing over the part they had occupied to dual rule. In 1910, the Belgians withdrew from the Lado, and South Sudan thus became subordinate to the British (Figure 4).

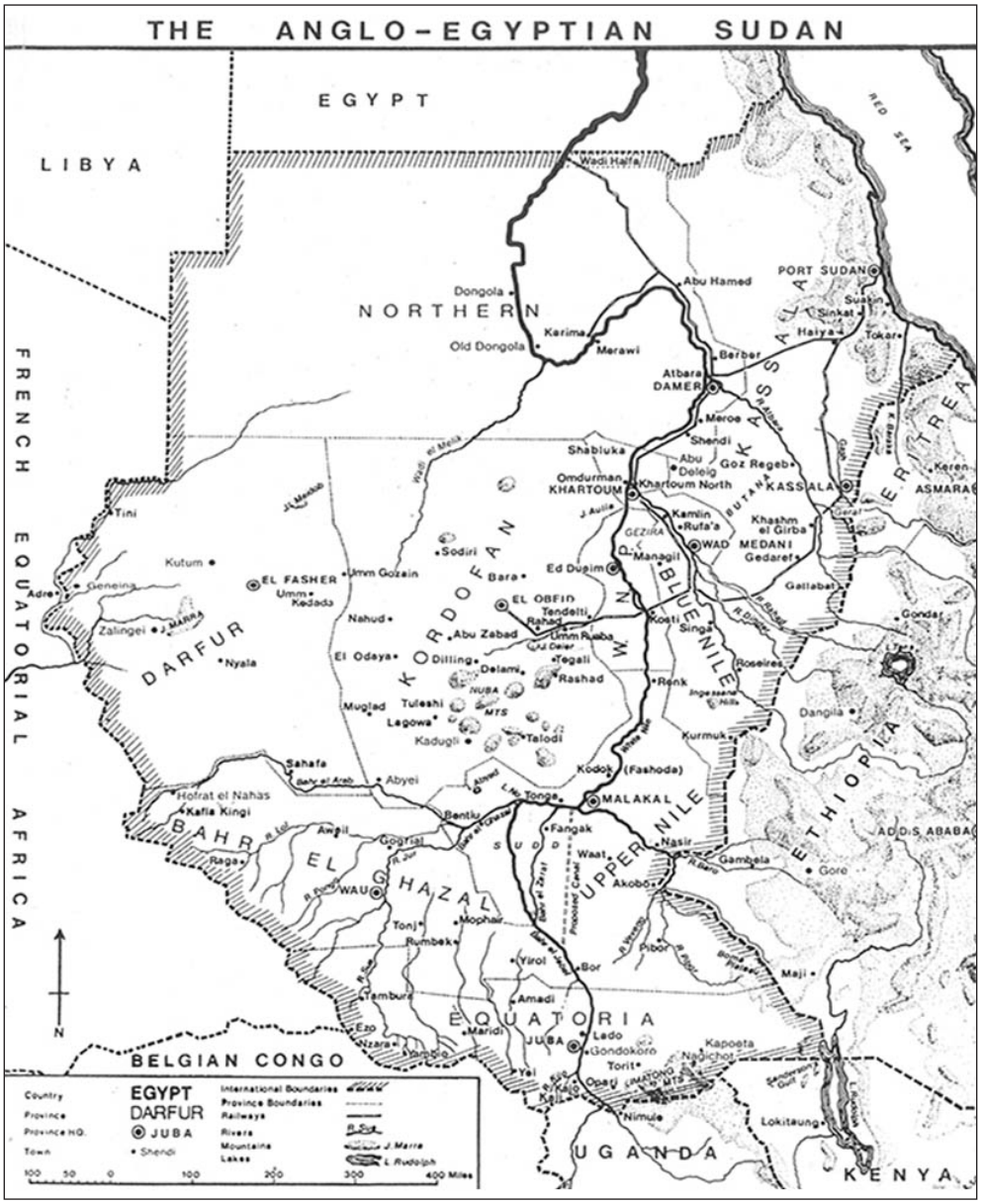

Figure 4: The map of Sudan during the British colonization

Source: https://www.google.com/search?q=maps+of+sudan+in+mahadist+state&tbm

2. The nature of the ideological thought of successive rules in Sudan: 18211989-

2-1: **The ideological thought of Turkish-Egyptian rule:**

The map of Sudan grew during the period of Turkish-Egyptian rule and included various types of natural environments and races, and of the religions Islam, Christianity, and traditional religions. This Turkish-Egyptian rule lasted for sixty years, during which the doctrine of racial superiority dominated the peoples of Sudan. This doctrine remained the main catalyst for expansion in Sudan. The Sudanese did not live the reality of the Islamic Caliphate and its principles but rather lived the imposition of residence, taxes, and forced labor. Sudan entered the era of employing peasants who produced for feudal lords in Egypt and for crop exchanges in Europe. Al-Qaddal (2002) believes that the growth of the global capitalist market has justified the process of conquering countries on the basis that it is a civilizational message, and capitalism has produced philosophical theories that claim the superiority of the Aryan race and its right to prevail. In addition, the middle class in Egypt began to secure its economic and political positions and move from the feudal system to the capitalist system, as this was directed to Egypt's foreign policies. In addition, the development of commercial activity between Sudan and Egypt has given the Egyptians an idea of Sudan's enormous wealth. The main reason for the expansion into the tropical regions and lakes was due to the escalation of conflict between capitalist countries during the sixth decade of the nineteenth century, which took the form of missionary, commercial, scientific, and scouting activity, an endeavor imposed by capitalist development that began to work to create a global market. The Egyptian economy transformed from a feudal economy to a capitalist economy and moved towards liberating the workforce from forced labor and slavery into the paid labor market.

The ideology of racial superiority and capitalism was framed in successive slave-hunting campaigns immediately at the beginning of the conquest, which led to the addition of new territories as a source of

slave labor and financial revenue. Ismail Pasha began his activity in the south of the Blue Nile by sending a military campaign to the Taba Mountains, near Sennar, capturing 1,900 individuals who were sent directly to Egypt. Then the Defterdar seized 1,200 Muslim slaves of the Muqaddam, 800 of whom were sent to Egypt, and asked the villagers to hand over "2,000" slaves to him. The campaigns continued to the Shilluk home during the reign of Al-Hakimdar Khurshid and to the areas of Wad Al-Abbasi. In 1827, an expedition headed to Dinka country, where it captured 500 Dinka. In 1828, Khurshid led an expedition to the Anqasnahome, then to the Shilluk home in 1830, during which 200 individuals were captured. In 1832, Al-Hakimdar Khurshid led an expedition to the Taka, then to the Fazughli Mountains, then to the Nuba Mountains in the years 1830 and 1832, in which he captured "2,000" slaves (Al-Qaddal, 2002). Local and Egyptian merchants, the Levant, and Europe participated in that trade. The ideology of capitalist thought was not limited to the slave trade only, but it also included gold mining, and the introduction of modern agriculture and crops, such as cotton, and it stimulated trade and imposed taxes.

Although it was the Turkish-Egyptian rule that united the South and North under a single political unit for the first time in history, this same era witnessed the beginning of the tense relationship between the south and the north. This is due to the policies followed by the Turks and the goals that motivated them. Among the future consequences of the slave trade was a deepening of the gap between the North and the South, an increase in the northern tribes' sense of racial superiority, and the confinement of the concept of "slave" to specific tribes, whether their members fell into slavery or not.Pasha(1998) points out, "The south was most of the time under semi-independent administration by European Christian rulers, while the north remained under the direct control of the Turks and Egyptians. If we add to this the weakness of transportation and means of communication between the two regions, we will conclude that they were in fact independent from each other" (Al -Pasha, 1998).

2-2: The ideological thought of the Mahadism State:

The dominance of the doctrine of racial superiority and the ideology of the capitalist market during the period of Turkish-Egyptian rule, led to a religious and ideological movement was born that sparked what was known as the Mahadism Revolution. Al Mahadism followed in the footsteps of the Messenger of God (PBUH). He appointed four caliphs, abolished the four schools of thought and Sufi orders, and considered himself the leader of the Islamic world and that he was the Awaited Mahadism. The Mahadism call was, in its essence, a Sufi thought based on diligence in worship, piety, and asceticism in this world.

Sudan was subjected between the period 1881-1899 to two conflicting types of Islamic schools of thought - the school of Islamic thought based on the Islamic Caliphate in Turkey, and the Mahadism school of thought, in addition to jihad for the sake of God, and its leader was Imam Muhammad Ahmad al-Mahadism and his supporters were men of the Sufi orders in Sudan.

As a result of this Islamic intellectual conflict, various regions of the geographical map of Sudan were exposed to instability, the migration of its citizens, and other effects associated with wars in general. The hostility of merchants to Turkish-Egyptian rule also led them to search for alternatives to it. Hence the need for an ideology of a comprehensive nature that unites the various regions and tribes and makes the continuation of the national market possible, by ensuring that social reality and the emerging national market acknowledge a limited ideology, and thus the idea of the Awaited Mahadism arose (Al-Qaddal, 2002).

The Mahadism - as he says - derived the essence of his movement from the Islamic heritage during its first purity - that is, during the era of the Prophet Muhammad (PBUH) and the era of the Rightly Guided Caliphs, and he mixed all of this with elements from the core of Sudanese society, which the Mahadism did not believe in as an independent unit from the Arab and Islamic nation. Al-Mahadism based his idea main-

ly on the invalidation of the Othman Caliphate, and he also took the expiration of the Turks as a prelude to the invalidation of the Ottoman Caliphate. Al-Mahadism mixed his position on the Ottoman Caliphate with his position on Europe in terms of its systems and culture.

Some southerners responded greatly to the Mahadism revolution, as "they believed that he (the Mahadism) had appeared to liberate the country's population from foreign oppression" (Deng, 1998). They were also fighting under a green flag sent to them by the Mahadism (Deng, 1999). But this relationship did not continue in this manner, as it quickly deteriorated to the point where the southerners called the two eras "the Turkish and the Mahadism" - without distinguishing between them - "the days when the world became corrupt" (Deng, 1998). In fact, there are several reasons that led to a bad relationship between the two parties, perhaps the most important of which is the Mahadism concept of southerners as only "infidels." Also, the Mahadism use of some slave traders distanced them from the Southerners who thought these elements were associated with slavery (Al-Pasha, 1998).

2-3: The ideological thought of British colonialism:

The Islamic religious thought adopted by the Mahadism revolution clashed with Western capitalist thought. The departure of capitalist countries in search of colonies was a product of the development of the capitalist system as a result of the availability of capital and the search for ways to benefit from it in the form of a profitable return. From the Berlin Conference of 1884, the movement to legitimize colonial expansion began. It was agreed that any European country that occupies land and raises its country's flag on it becomes its colony, and other European countries must recognize that right to it.

The British established the British Policy of Administrative Separation (1898-1947) between the North and the South, as well as between the North and the Nuba Mountains and Anqasana regions, arguing that there were geographical, political, historical, and cultural differences between them. To ensure the effectiveness of this policy, the British

issued the Closed Areas Law in 1920 and the Passports and Traffic Permits Law in 1922, so that travelers between the North and the South use passports and traffic permits, and determine the purpose of the visit. They then passed the Permission and Trade Act in 1925 under which Northern Sudanese were required to obtain permission to trade in South Sudan. Finally, a language policy was introduced and supported in South Sudan in 1928, which adopted English as the official language, approved the use of local tribal languages, and prohibited the use of Arabic in South Sudan.

The cumulative effect of these laws has been to keep South Sudan separate from its north. The colonial rulers of South Sudan used to attend conferences in East Africa instead of Khartoum. After establishing the institutions of their rule, the British continued to strengthen their position in northern Sudan by creating the necessary administrative and political structures for northern Sudan. In their effort to prepare it for self-rule, they enacted the Northern Sudan Advisory Council Law in 1943, which included the six northern governorates: Khartoum, Kordofan, Darfur, Sharqiya, Northern and Blue Nile. All members of the council were northerners, and that council had no reference to South Sudan. Instead of establishing an advisory council for South Sudan similar to that of North Sudan, the decisions of the Administrative Conference of North Sudan, which was held in Khartoum in 1948, supported the subordination of South Sudan to its north.

The British administrators in South Sudan did not attend that conference as they were not satisfied with its decisions. The British ended their policies towards South Sudan with the Juba Conference in 1947, which approved the subordination of the South to the North. This decision culminated in the establishment of the Sudanese Legal Assembly in 1948, where thirteen southern negotiators were forced to represent the South in this assembly (Machar, 1955). The Cairo Conference in 1953 was not an exception. The British had previously thought about annexing South Sudan to Uganda or Kenya, but the British rulers of those British colonies refused on the grounds that it would increase

the burdens on them, especially the ethnic aspects that distinguish South Sudan from these colonies.

British colonialism worked to exploit religion to tear apart national unity in Sudan. Christian missionary campaigns in South Sudan were working to spread Christianity and incite against the Islamic religion and portray it as a racist religion (Al-Bouni, 1996). Thus, religious differences in Sudan became one of the causes of conflict and political instability, as Muslim attempts to implement Islamic law - the religion of the majority - led to opposition from non-Muslim minorities, especially in South Sudan.

The colonial policy previously mentioned led to the South being "composed of the majority adhere to tribal religions, a Muslim group, and an educated southern elite who see their African and English culture as a protection of Arabicization, and their Christianity as a protection of Islam, and together they have a distinct identity" (Al-Mahdi, 1982).

2-4: The ideological thought of post-independence regimes: 1956-2012

British colonialism left behind a formation of political parties with different ideological orientations, although the ideological basis of some of them was common. Some of them adopted traditional Islam, such as the Umma Party (the Ansar sect), or secular thought, such as the Anti-colonial Front - the front of the emerging communist movement at the time. Some of these parties worked to gain power through the military establishment. In 1958, Prime Minister Abdullah Khalil Bey came, with the approval of the Ansar leadership (Mr. Abdul Rahman al-Mahdi) and the political bureau of the Umma Party in the government of Ibrahim Abboud, after offering Abboud to assume power in order to preserve stability in the country.

The Abboud government continued until the October 1964 Revolution, which was organized by the modern political parties represented by the Sudanese Communist Party, which, despite its great activity against military rule, was surprised by the revolution in 1964, and the Muslim Brotherhood, which can be considered among the instigators of the revolution.

In 1969, the Sudanese Communist Party succeeded in reaching power also through the military establishment in what was known as the government of Jaafar al-Numeiri. This government began with leftist ideological tendencies, but it quickly turned its back on the Sudanese Communist Party, persecuting and displacing it. Then it adopted capitalist ideological thought as a school of economics and sociology. This government continued until it fell in 1985 in what was known as the March/April Uprising.

Throughout these successive years, the geographical map of Sudan has maintained its borders that were left by British colonialism in 1956 (Figure 4). The rebellion in South Sudan, which began in 1955, was stopped with the signing of the peace agreement in 1973 between the government of Jaafar Numeiri and the Anyanya II movement led by Joseph Lagu. The relationship between North and South Sudan remained stable until 1983, when the government of Jaafar al-Numeiri adopted an ideological approach that combined capitalist and Islamic thought by applying Islamic law as a system of government. The south rebelled again, and the Sudan People's Liberation Movement, with its leftist ideology, was established. These two ideological ideas clashed and established the religious-political conflict in Sudan that framed the separation of South Sudan from North Sudan in 2011 based on the Naivasha Agreement in 2005.

The rule of Jaafar al-Numeiri ended in 1985, followed by a period of democratic rule that did not last long, as it ended in 1989 with the National Islamic Front (one of the branches of the Muslim Brotherhood movement in Sudan) allying with the military establishment to come to power and establishing what was known as the National Salvation Revolution.

Since its inception in the late 1940s, the Islamic movement has sought to be influential in society and government (Haj, 2010). The movement was able to achieve one of its main goals, which was implementing Islamic rule by assuming power. "However, the implementation on the ground after assuming power made it clear that implementation has its own challenges in a society characterized by significant non-Islamic minorities, a large political and social movement, and a significant legacy of revolution, rebellion, and disobedience" (Haj, 2010). The National Salvation Govern-

ment did not anticipate this, because of the fanaticism of old loyalty, nor to the elites that have been in control for three decades, nor because of the close connection between internal and external factors. This resulted in the clash of the fundamentalist ideological thought of the Islamic Movement in Sudan with the leftist ideological thought of the Sudan People's Liberation Movement, which changed its first Marxist approach and adopted a capitalist (Western) ideological approach after the fall of the Soviet Union and the fall of Mengistu in Ethiopia. The Islamic movement adopted jihadist wars, which framed the religious war between North and South Sudan and the entry of external factors represented by the ecclesiastical and Jewish religious current supporting the Sudan People's Liberation Movement. This ideological war continued until the signing of the Naivasha Agreement in 2005.

3. Naivasha Agreement 2005

The Naivasha Agreement was signed to stop the war between North and South Sudan in January 2005. Throughout the period of this war, the form of the conflict took on a geographical dimension, meaning that South Sudan was a separate region with religious and ethnic specificity. Therefore, this agreement included a clause stipulating the right to self-determination for South Sudan after holding a referendum in 2011. It also included an important clause of what is called popular consultation, which is giving the right to the regions of Blue Nile and South Kordofan (The Nuba Mountains) to join the South, or the North, or choose independence despite these areas belong to the north, and the Sudanese army was withdrawn to the north of the 1956 borders, which were not demarcated and defined. The Abyei Protocol also gave the people of this region the right to vote in making their decision on whether to belong to the North or the South, even though this region belongs to South Kordofan and falls within the 1956 borders.

The transitional period of the five years passed after the signing of the agreement, and a referendum was held on the right to self-determination and resulted in separation. South Sudan separated from its north in September 2011, and the state of South Sudan was established (Figure 5).

Thus, Sudan lost a third of its area, its natural resources weakened, and its map took a form different from what the Sudanese were accustomed to more than a century (Figure 5).

Figure 5: Sudan's map in 2011

Source: https://www.google.com/search?q=maps+of+sudan+in+mahad-ist+state&tbm

The signing of the Naivasha Agreement was preceded by preliminary Machakos negotiations, and IGAD and its partners and friends played a role in paving the way for secession, which had a profound impact on the present and future of Sudan. We must also point out the role of the advisors to the President of the United States of America (who was not involved in IGAD) and their hidden role in everything that happened before Machakos, before Naivasha, before the referendum, and before the independence of South Sudan.

References:

- Al-Amin, Y, M. 2003. "The Sudanese Cultural Heritage: Challenges to National Unity and Regional Belonging." Research presented at the Arab World and Africa Symposium: Challenges of the Present and Future. Rabat 15 - 17 October 2003 AD. p. 30.

- Al-Bouni, A, L. 1996. The Religious Dimension of the South Sudan Issue (1900-1989), Center for Strategic Studies, Khartoum, p. 31.

- Al-Mahdi, S. 1982, "The Future of Islam in Sudan," in the Islamic Thought and Culture Group, Islam in Sudan, Dar Al-Asala for Printing and Publishing, Khartoum, p. 388.

- Al-Pasha, M. 1998. Ethnic diversity and foreign policy in Sudan, Center for Strategic Studies, Khartoum, pp. 100-101.

- Al-Qaddal, M, S. 2002 Modern History of Sudan 1820-1955. Second edition, Abdul Karim Mirghani Center, Khartoum, Sudan. p. 22.

- Britannica Online Encyclopedia. (2012). social science : Marxist influences - Britannica Online Encyclopedia

- Davies, H.R.J. (1970). Tropical Africa: An Atlas for Rural Development. University of Wales Press, Cardiff, p.23.

- Deng,. 1998. The Conflict of Visions: The Conflict of Identities in Sudan, translated by Dr. Awad Hassan, Center for Sudanese Studies, Cairo, pp. 73-74.

- Deng, . 1999. The Problem of Identity in Sudan: Foundations of National Integration, translated by Muhammad Ali Jadin, Center for Sudanese Studies, Cairo, p. 102

- Haj, A.H. 2010. The Islamic Movement and Political Authority in Sudan: An Evaluation of Performance.

- Khabier, A. R. M. 2012. Excavations of the Dhanqeel archaeological site. Article in Al-Sudani daily newspaper, issue 2304, 5/18/2012, p. 11.

- Love, J., W., Lesher, D. L. 2004. To Guarantee the Peace :An Action Strategy for a post-conflict Sudan. Center for Strategic&International Studies, Washington. P 69.

- MacharR. T. D (1995): "South Sudan: A History of Political Domination-A Case of Self-Determination". Ben.Parker@dha.sasa.unep.no (Ben Parker)Subject: document Message-Id: c51_9511191041@sasa.unep.no

- Marsden, G. M. (1980). Fundamentalism and American Culture. MacMillan. pp 4-5

- Mousa M., M., Villicaña, R.L. (2008). An Analysis of the Naivasha Agreement. http://www.zkppan.waw.pl/srodek/Analysis%20of%20Naivasha.pdf

- Oxford Dictionary. Com (2012). http://oxforddictionaries.com/definition/english/imperialisma

- Shillington, k. 2005. History of Africa: Revised Second Edition, New York: Macmillan Publishers Limited, p 301

- Wiki.Answers.com. (2012). http://wiki.answers.com/Q/What_is_the_definition_of_Confederate_Government#ixzz21jYMGybhht

- Wikipedia. (2012). http://en.wikipedia.org/wiki/Federation

9

The Physical Geography of Sudan, A Source of State Power

9

The Physical Geography of Sudan, A Source of State Power

Sudan has a distinct and spatially diverse physical geography due to its geological history and wide geographical extension. this provides a wide range of natural resources, making it one of the richest countries in the world by natural resources, providing the power of the Sudanese State and a basis for utilization for spatial and human development. State.

Sudan extends between the two latitudes (8˚ 45′ - 23˚ 8′ N) to the north and the longitudes (21˚ 49 - 340 23/) to the east, after the secession of South Sudan in 2011 AD (Figure 1). Thus, it covers an area estimated at approximately 1,800,000 square kilometers, and by so, comes second in Africa and third in the Arab world. Before the secession of the south in 2011, Sudan was considered the largest African country in terms of area (2.411 million km2). Its land borders are 6,780 kilometers long, bordered by Egypt, Libya, Chad, Central Africa, South Sudan, Ethiopia, and Eritrea. It has 750 kilometers of sea borders on the western Red Sea coast (Figure 1). This great latitudinal extension, huge area, and long maritime borders gave great importance to its geographical location and geopolitical status. Sudan's strategic location qualifies it to cross the African Corridor and the Silk Road into deep Africa, where 20% of international trade is expected to cross (Abu Saleh, 2020).

The surface of Sudan is predominantly flat where 45% of its area ranges in altitude between 300-500 meters, 50% of which is less than 1,200 meters in height (Barbour, 1961), and 2% of which is less than 300 meters. The Jebel Marra area, which reaches an altitude of about 3,089 meters, is considered the highest area, and the Red Sea Mountains occupy 2.7% of the area of Sudan.

There are three groups of basic rocks in Sudan, distributed in varying proportions over the country's total area. They include bedrock (48%), sedimentary rocks (47%), and modern deposits (3%) (GRAS, 2006), in addition to the Umm Rawaba series of deposits that cover. A wide area of central and northern Sudan, consisting of clay, unconsolidated continental sand, and sandy clay.

Figure 1: Sudan's geographic location

Source: https://www.britannica.com/place/Sudan

These geological formations contain metallic and non-metallic minerals such as iron ore, kyanite, nickel, talc, tungsten, zinc, gold, chromi-

um, manganese, salt, and mica deposits. In addition, cement has been produced from limestone rocks since 1949 AD, and oil has been extracted since 1980 AD in southeastern Abu Jabra, at a flow rate of 11 thousand barrels/day (Shekarchi 1979). Some estimates indicate that Sudan possessed, before the South's secession in 2011, the equivalent of 80x108-100x108 bbl of hydrocarbon resources (Sidahmed, 2013). The rock formations also provide groundwater with high productivity, high storage rates, and desirable properties for drinking and irrigation. An example of this is the northern part of the Khartoum Aquifer in central Sudan (Farah et al. 1997).

Rocks are a source of different types of soil in Sudan. There is sandy soil in the desert and semi-desert regions in northern and western Sudan. It is characterized by fragile and low-fertile soil that is used to grow many cash crops and important pastures for livestock and camels. Clay soils, which are classified as vertisols in three of the international soil classification systems (Blockhuis, 1993), are found in central and eastern Sudan and extend from the west of Kassala through the Jazira region and then South Kordofan. They are the main agricultural areas for the production of corn, cotton, and mechanized agriculture, and a major source of agricultural products. Forest, especially gum Arabic.

The soil between the White and Blue Nile includes two groups of soils. There is the first group of riverine soil including the silt of the White Nile, silt, and the silt clay of the Blue Nile. There is the second group of the various soils that consist of sand and silt with a mixture of fine materials and the silty soil that is found in the lower latitudes of the White Nile, along the Blue Nile and the Nile River up to the High Dam Lake, the Gash Delta and the Khor Baraka Delta. (Library of Congress, 2007) There is a group of dark clays located above the current flood level of the rivers between the White and Blue Nile (Mubarak, 1982).

The extension of Sudan into thirteen transverse circles resulted in the desert and semi-desert areas located north of 16° north latitude accounting for 30% and 20% of its area, respectively, while the savanna

region, which extends from 10° to 16° north latitude, constituted about 38%. It also resulted in the diversity of its climatic regions, which differ in some of their characteristics, from savanna in the south to dry desert in the north, with a maritime climate on the Red Sea coast. Solar radiation, whose daily average ranges from 3.05 – 7.62 kW h m-2 /day, provides a natural resource for solar energy production. The wind speed, whose annual average ranges between 1.53 - 5.07 m-1, and its highest average speed between 1.35 and 49.5 W m-2, (Omer, 1997) also provides an opportunity to introduce some technical applications in remote rural areas.

Rainfall provides an important main natural resource, contributing about 400 billion cubic meters annually to the total water in Sudan. It is characterized by a decrease in its annual quantities from 700 mm in the southern borders to less than 20 mm in the north. The difference in the amount of rainfall may reach about 50% in the northern half of Sudan and 30% in the central part of it. It is characterized by a short period of rainfall, fluctuations, and an irregular beginning of the rainy season (Hulme, 1990). Traditional agriculture depends on rainwater in many places in western and central Sudan, as well as extensive agriculture in the clay plain in Gedarief. In addition, rainwater provides a source of drinking water in many parts of Sudan, works to renew natural pastures and forests, and recharges underground reservoirs.

The natural vegetation in Sudan is distributed according to rainfall amounts and soil type. This produced seven natural vegetation zones. Vegetation cover, although rare, is limited to the desert region in the northern part of the country in the water courses, and it consists of scattered grasses or thorny shrubs in the semi-desert region. There are species of acacia in the dry northern regions of the poor savannah region, and a mixture of deciduous species in the southern, more humid part of it. In the high-rainfall savanna region, most of the vegetation consists of deciduous species. In the mountainous region, it consists mostly of broad-leaved species, in addition to two species of coniferous trees.

This vegetation is rich in natural groups of more than 100 species of trees that differ greatly between them, and at the level of the same spe-

cies, due to the difference in rain amounts and soil type. Their geographical distribution has enabled the distinction of sub-gynecological zones for tree seeds (El Warag et al, 2002).

Forests cover 18% of the area of Sudan, or about 455 thousand km2, and are equal to 61% of the forest area in the Arab world, before the secession of the state of South Sudan in 2011 AD. Forests contribute to providing more than 82% of the energy consumed in Sudan, producing 3.6 million cubic meters of wood, in addition to producing 5 million tons of fodder, 300,000 tons of fruits, 20,000 tons of natural materials, and 35,000 tons of dyes and printing materials, contributing by about 12% of the gross national product. The forest sector provides about 4% of job opportunities for the population, which is equivalent to 275 thousand people. Forests are natural and permanent pastures for livestock in the country, as they provide about 70% of food for animals, and contribute about 80% of the global production of gum Arabic, of which 10% comes from the acacia tree. The genetic resources of local plants, which include many species of wild plants, also provide a source of food during times of famine in some areas. Natural plants also provide abundant sources of biomass energy (Omer, 2005).

The Nile system extends over the vast Sudanese plain from south to north, and its central clay plain is divided by a general slope from the southeast to the northwest. It consists of the White Nile, the Blue Nile, and its tributaries, the Atbara River, the main Nile, and many seasonal valleys (Figure 2).

The Nile system contributes about 93 billion cubic meters of water annually, of which 20 billion cubic meters is allocated to Sudan. The Blue Nile contributed about 44.36 billion cubic meters annually to this water budget during the period from 1965-2005, while the Rahad River contributed about 1.25 billion cubic meters, and the Dinder River contributed about 3 billion cubic meters. The White Nile contributed about 26 billion cubic meters during the period 1943-1992 (Barsi, 2018). And the Atbara River contributed about 12 billion cubic meters during the same period. Seasonal valleys contribute about 6 billion cubic meters of water annually

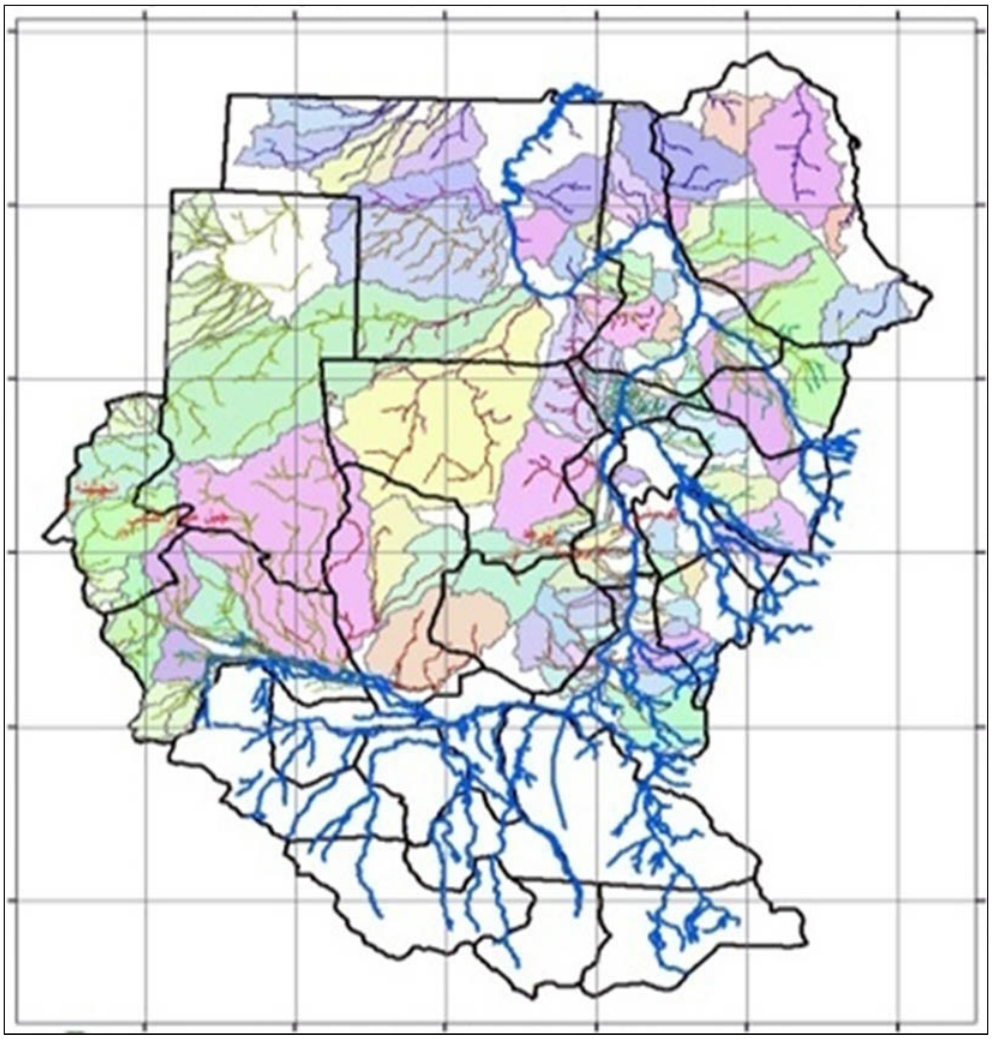

Figure 2: The Nile and valley system in Sudan

Source: Dams Implementation Unit - Sudan, 2019

, and non-renewable groundwater contributes about 4 billion cubic meters.

From all these sources, in addition to rainwater, the amount of water available to Sudan annually amounts to about 30 billion m3, less than 50% of which is currently exploited, and the annual per capita share of it reaches less than 1000 m3 (<1000 m3) (Barsi, 2018). Despite this, Water is considered limited for Sudan, despite the abundance and

availability of land for irrigation, due to its geographical location upriver about Egypt and downstream in relation to Ethiopia and the tropical lakes (Hamad et al. 2005).

Sudan has established a number of dams on the network of rivers and valleys to control irrigation water for agricultural projects, electricity production, and fishing. The storage capacity of the Sennar reservoir is 7.4 billion cubic meters, and 60% of agriculture in Sudan depends on it to irrigate the Geziera scheme and the extension of the Managel. It has an outlet for two canals to irrigate two million acres proposed in the Kenana and Al-Rahad plains. It also produces 1,800 megawatts of electricity and about 1,000 tons of fish annually.

The Merowe Reservoir, which has a storage capacity of 12.5 km3, contributes about 20% of the Nile water flow and produces 125 megawatts of electricity and 2,000 tons of fish annually. As for the Roseires reservoir, its storage capacity reaches 7.4 billion cubic meters, and the Khashm al-Qirba Dam has a storage capacity of 7.4 billion cubic meters. As for the Setit Dam, it consists of the Romila Dam on the upper Atbara River and the Bardana Dam on the Setit River. The volume of its lake reaches 2.7 billion m3, and it produces about 135 megawatts of electricity. There are a number of proposed dams, such as Al-Sharik at the fifth waterfall, Kajbar at the third waterfall, and Dal at the second waterfall.

Sudan's flat surface, rock formations, and wide latitudinal extension provide enormous potential for agricultural investment and pastoral activity. Between the extremes of drought in the north, with the exception of the Nile Valley, and humidity and wetness in its southern outskirts, there are vast stretches of uninhabited land. This is due to the nature of the river system and climatic conditions. The arable land in Sudan is estimated at about 200 million acres (84 million hectares), of which 40 million acres, equivalent to only 20%, are cultivated. Agricultural activity in Sudan is based on these resources to accommodate about 75% of the total population (Dawelbeit et al. 2010).

Agriculture is divided into three main types: mechanized rainfed agriculture, which covers an area of 7 million hectares, traditional rainfed agriculture, which covers an area of 29 million acres, and modern irrigated agriculture. The irrigated area approaches 11 million acres, representing 60% of the cultivated land and employing 65% of the population engaged in agricultural production (Siddig et al. 2012). It is more concentrated in the clay plain in the Geziera region and the narrow strip on the Nile, where the population density reaches 87 people per km compared to an average general density of 4 people per square kilometer (Dawelbeit et al. 2010).

Modern irrigated agriculture is practiced in the Geziera scheme and Managel extension which are irrigated from the Sennar Dam, besides some other major schemes irrigated by canals and pumps along and close to the Blue Nile and the White Nile. Irrigated agriculture consumes about 16.8 million cubic meters of water, representing about 93% of Sudan's share of the Nile water.

The irrigated area of the Blue Nile is equal to 2.848 million acres, consuming 9.265 million cubic meters of water, and the irrigated area of the main Nile is equal to 2.8 million acres, consuming 1.22 million cubic meters. Out of this area, there are 0.98 million acres irrigated by pumps, and about 2.1 million acres are irrigated from the Sennar Dam. The remaining acres are irrigated by flood irrigation in the northern states, Tokar and Al-Gash deltas. The total area that may be affected by the construction of the Renaissance Dam is estimated at about one million acres, with no possibility of expansion in the future.

Agriculture represents the most important sector in Sudan's economy, as it contributes 40% of the national income, and depends on food and cash products that support about 80% of the population. 64.4% of the labor force works in the agricultural sector, 79.2% of women and 53.3% of men, and its workers are distributed in similar quantities in all regions of Sudan except Khartoum State. Also, about 97% of Sudanese exports are based on low-value primary commodities and manufactured food products (Robinson, 2005). The embryonic char-

acteristics of some agricultural products, especially wild species have demonstrated distinct morpho-agronomic traits and a high ability to resist diseases, insects, fungi, and viral diseases (Tahir et al., 2004). The agricultural sector, especially the traditional one, faces many problems related to state policies and fluctuating amounts of rain (Mahgoub, 2014).

Livestock benefit from natural pastures, most of which are found in Kordofan and Darfur, occupying an area of 110 million hectares. Livestock is estimated at approximately 134 million heads, including 3 million camels, 40 million cows, 49 million sheep, and 42 million goats. There is more than 90% of the livestock in Sudan are raised in the traditional pastoral system that relies on natural pastures that provide 86% of the feed for the herds, plant concentrates provide 4%, while irrigated fodder, crop residues, and agricultural by-products provide 10%. Sudan produces about 18.6 million tons of livestock annually (Babiker, 2015).

These unique physical geographical elements of Sudan have provided a wide range of natural resources on which internal development has been based and has become the focus of attention of global and regional powers. It provided the power of the Sudanese State where for Michael Foucault, power is widely distributed across cultural paths and situations (Harris,1991). However, they formed serious threats either internally or externally to the Sudanese State, which will be outlined here.

References:

- Babiker, I.A.,2015. Animal feed industry in Sudan, current status, problems and prospects. J Dairy Vet Anim Res 2 (3):0036.
- Barbour, H.K. 1961. Geography of Sudan, Oxford University Press, London.
- Barsi, B.2018 .Nile Water Resources. Sudanese Geographical Society, Facebook.

- Blockhuis, W A. 1993. Vertisols in the central clayey plains of Sudan. Washington dissertation abstracts 158 (12).

- Dawelbeit, S.E., Salih, F.M., Dahab, O.A., Ahmed, E.H. 2010. Status of fertilization and crop nutrition in irrigated agriculture in Sudan: Fertilizer use in Sudan. Research Findings: e-ifc, No 22.

- El Warrag, A. A., Elfeel,, E.A., El. 2002. Forest genetic resources conservation in Sudan. Forest Genetic Resources 30, 48-51, fao. org.

- Farah, E.A., Barazi, N.1997. Groundwater resources in a semi-arid area: a case study from central Sudan. Journal of African Earth Sciences 25 (3):453-466.

- GRAS, Geological Research Authority of the Sudan. 2006. International event partners. Compiled by Obied A. and Abel Rahman. GRAS, Khartoum.

- Hamad, O.E., El-Battahani. A. 2005. Sudan and the Nile Basin. Aquatic Sciences 67 (1):28-41.

- Harris, C.1991. Power, modernity, and historical geography. Annals of the Association of American Geographers 81 (4): 671-683.

- Hulme, M. 1990. The changing rainfall resources of Sudan. Transactions of the Institute of British Geographers 15 (1): 21-34.

- Library of Congress. 2007. Soils of Sudan. https://country studies. us./sudan/31.htm.

- Mahgoub, F.2014. Current status of agriculture and future challenges in Sudan. Nordiska Afrikainstitutet.

- Mubarak, M.O.1982. “The vegetation of central Sudan” In Williams A J. et al. 1982: A land between two Niles

- Omer, A.M. 2005. Biomass energy potential and future prospects in Sudan. Renewable and sustainable energy reviews 9 (1):1-27.

- Omer, A.M.1997. Compilation and evaluation of solar and wind energy resources in Sudan. Renewable energy 12 (1):39-69.

- Shekarchi, E.1979. The mineral industry in Sudan. Mineral Yearbook.

- Sidahmed, A. 2013. Oil and politics in Sudan. Sudan Diviede, 103-120. Link. Springer, com

- Siddig, K.H.A., Babiker, B.J. 2012. Agricultural efficiency and trade liberalization in Sudan. African journal of agricultural and resource economics 7 (311-2016-5599), 51-69.

- Tahir, I.M., Yousif, M.T. 2004. Indigenous melons (Cucumis melo L.) in Sudan: a review of their genetic resources and prospects for use as sources of disease and insect resistance. Plant genetic resources newsletter. Agris.fao.org.

10

Utilization of Natural resources of Sudan,
a source of internal and external threats

10

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Sudan has a distinct and spatially diverse physical geography due to its geological history and wide geographical extension. this provides a wide range of natural resources, making it one of the richest countries in the world by natural resources, providing the power of the Sudanese State and a basis for utilization for spatial and human development. However, these natural resources brought about serious threats to the Sudanese State due to colonial and post-colonial utilization policies, and foreign powers who were eager enough to control and obtain them at the lowest prices. These internal and external threats are serious enough to determine the future of Sudan, and therefore worth investigating. This research aims to review Sudan's physical geography in view of natural resources, power, and threats to the Sudanese State, based on data from relevant published scientific research.

1. Natural elements of power of the Sudanese State: a source of internal threats

Sudan's natural resources have made it vulnerable to internal threats that greatly influenced its stability. Due to their sharp geographic variations, these natural resources determined development efforts to emphasize where. Development efforts during the British colonial period (1898-1956), and subsequent national governments resulted in a pattern of polar development centered around central Sudan where there are abundant Nile waters and fertile soils. They have high potential in agricultural and livestock production in addition to water sustainability compared to the regions of western and eastern Sudan and the far north of Sudan.

The Gezira scheme played a paradoxical role in the capitalist transformation of Sudan, as it worked to strengthen non-capitalist production relations and develop marginal capitalism (Tony et al., 1991).The areas previously developed by colonialism continued to attract agricultural production, industries, and urban growth, which led to its continuation as the heartland region of Sudan. The mudflats of central Sudan were imposed as a core region, it created a state of organized dependence on its margins through the construction of institutions in the marginal regions governed by the authorities of the core region (Friedmann, 1966).

There were some axes of development efforts to the east and a few to the west and South Sudan where traditional rain-fed agriculture was widely practiced and depended solely on rainfall. The sector of traditional rainfed which basically a self-sufficiency sector, did not receive as much as it did the modern agricultural sector. They formed margins that produced manpower for the core regions in central Sudan. These margins are exposed to strong negative forces aimed at countering the trickle-down effects of economic growth so that the balance of this group of forces increases the process of regional imbalance. Likewise, centrifugal forces and the failure of businesses to realize investment opportunities at the margins lead to negative effects of industrial development to expand the regional imbalance in Sudan.

The traditional agriculture sector suffered problems of poverty and food insecurity. The deterioration of traditional agriculture and income distribution is considered one of the most important causes of the food deficit in Kordofan and Darfur (World Bank, 1990). Despite the efforts made to reduce poverty in Sudan, it is still widespread (Abdelmawla, 2014), showing a pattern characterized by unidimensional and low multidimensional occurrences for both children and adults. This pattern indicates that Khartoum is the least poor, while North Darfur and Warab states are the poorest. While the level of poverty increased, its severity decreased in the period 1978-1980 compared to the period 1967-68 and it was predicted to increase (Farah et al., 1995).

Tribal unrest and ethnic and armed rebels developed in the neglected

areas, fueled by the deeply rooted center-periphery concept. Over time, a systematic, gradual change in the nature of the conflict occurred from the traditional form of tribal and ethnic nature to one over resources. The role of resources increased with the worsening of the economic crisis, as it emerged as an influential force in the civil war in Sudan (Suliman, 1977). There are hidden dimensions to the issue of South Sudan, among which is intense conflict over diminishing resources among ethnic groups in different parts of Sudan (Kok, 1996).

The conflict in Darfur is considered an ecological conflict in origin, based on competition over natural resources. It is associated with environmental scarcity of renewable resources, particularly water resources, as elsewhere in the developing world (Suliman et al., 2005). Generally, the conflict on water resources in Sudan took the forms of conflict around the trans-boundary waters of the Nile, around the connections between internal resource scarcity and civil conflict, and around the impacts of internal conflict on water abundance and development (Selby,2014). There is only limited evidence to support the first two connections, but there is strong evidence confirming that the effects of water abundance, social economic development processes, and internal colonization related to state-directed water have violent repercussions (Selby, 2014).

In the issue of natural resources, the revolutionary government in Sudan in 1989, considered a vision of authoritarian modernization, where water and agriculture have become essential pillars of state-building projects (Verhoeven, 2015). The Sudanese economy benefited from the oil sector, but this was accompanied by a depletion of resources in a way that differs from what happened in previous periods of Sudan's history, within the framework of the opportunities that oil revenues provide to the ruling elite in Sudan (Large, 2007).

2. Natural elements of power of the Sudanese State: a source of external threats

Sudan has been facing elaborated and integrated strategies to weaken it in preparation for the passage of foreign agendas and interests to

benefit its richness of natural resources. These included inciting strife, unilateral sanctions, the debt trap, the political agenda of international institutions, and creating repeated crises (Abu Saleh, 2020).

The Nordic countries have increasingly engaged in the process of horizontal domination and sovereignty as they seek access to natural resources as the global economy grows and becomes more integrated (Carmody, 2009). They have projected their combined power onto the countries of the Global South to assert vertical control in the ongoing sharing and withdrawal of resources. This domination and control gave rise to a cruciform world structure, where the resulting uneven development was associated with poverty, competition for resources, and conflict (Carmody, 2009). This is part of the new generation of colonial governments built through contemporary investment agreements that were opposed to the New Bandung Framework agreements based on a stable North-South order (Mann, 2003). One of the results of this was widespread aggression and seizure of lands around the world by international institutions, the worst of which was on the continent of Africa. Between 2010 and 2011, an estimated 227 million hectares in the Third World were sold, licensed, or leased to foreign institutions. In 2009 alone, 50 million hectares were transferred from farmers to these institutions. Some of this land was purchased, while the vast majority was leased over a long period of time, ranging from 25 to 99 years, which usually had to be renewed (Broughton, 2012).

Sudan, within these trends, agreed to lease millions of acres to Saudi Arabia, Bahrain, Turkey, and China. The UAE is the largest destination for exports in Sudan, followed by China. This is a facet of the seizure of land and agricultural investments in Africa through Asian countries. Asian investments represent an attempt to meet the rising food demands of the new elite in emerging economies and class cooperation between them and the African elite, rather than a crisis of accumulation (Mann,2003). It bears the characteristics of core-centric models, such as accumulation through scarcity and dispossession. This failed to stop the collapse of accumulation strategies in the countries of the North by virtue of their con-

nection to the new forces, policies, and movements in the countries of the South.

Sudan found increasing global attention when it became an exporter of oil, and more attention focused on oil as a source of wealth and power and as a subject of potential conflict (Obi,2007). In reality, oil alone will not lead to violence and corruption, because conflict only occurs as a result of the "politicization" of the oil factor in ways that make control over it and its distribution confined to the hands of a few who work to make it exclusive to others (Obi,2007). The dialogue on the relationship of oil to development in Africa is framed around the theme of the "resource curse," as some believe that oil wealth fuels corruption in the state and creates social crises, and violent civil conflict.

Sudan has emerged as a cornerstone of developing economies, linking the oil-rich Arab countries with the rest of sub-Saharan Africa where its coastline on the Red Sea is an important sea route. It has received significant grants and loans from Arab countries to increase its agricultural productivity so that it becomes a food basket for the Arab world and to achieve regional food security so that it can avoid any economic boycott imposed on it by the Western world in the future. Until recently, Sudan was not an expected element linking the desires and interests of Arabs and sub-Saharan Africa. These countries see preparing Sudan as a showcase for agri-business in the Middle East. Whatever the promise of such development trends, they represent the most important economic and political changes in Sudan since the entry of British colonialism (Collins, 976).

The American policy strived to grant independence to the Darfur region (Al-Muslim website, 1426 AH) as it is rich in uranium, gold, and petroleum (Abdel Baqi, 2018). International oil companies are waiting for Darfur to secede from Sudan so that they can achieve the greatest possible gains. Therefore, the theory of creative chaos has been operating in Darfur since 2003, alongside an international game whose chapters have not yet been completed around the oil triangle located in the common area between western Sudan - Darfur in particular - Chad and Libya, which is essentially a French-American-Chinese conflict.

In contrast to Clinton's policy aimed at isolating Sudan, George Bush conducted a dialogue with Khartoum, followed by a constructive policy between the two parties. This is due to the influence of the American Church, and economic interests, especially the pressure group or the oil lobby (Huliaras,2006). This is in addition to the Israelis' ambitions in the Darfur region, whose area is equivalent to 20% of the area of Sudan, and is linked by international roads to Egypt and Libya, contains about 69 million tons of high-purity uranium ore, which is the third or fourth-largest uranium stockpile in the world (Al-Sahli, 2018).

China's rise is an urgent problem, not only for its neighbors or for the United States, but it is a strong geographical challenge for others. Its influence on land and over the seas is expanding, supported by its distinguished location on the map. China has shifted the balance of power in the Eastern Hemisphere by securing its economic needs (Kaplan,2010). What China is doing in Africa today is similar to what the British did 150 years ago. One of the factors that worked to strengthen the Chinese presence in Africa is the authoritarian countries. It can be considered a colonial power that exploits natural resources (Junho,2007).

China has played an influential role in Sudan and has become linked to internal instability and the ongoing external difficulties and risks that have characterized the policies of the central Sudanese state since 1989 AD (Large,2009). The principle of non-interference has been an essential element in Beijing's relations with various governments in Khartoum since 1959. Since 1990 AD, the Chinese role in Sudan has become more rooted and important (Large,2009), and Chinese behavior has been characterized by moderation (Carmody et al. 2010). China, in its relentless pursuit of energy sources, has established relations with "pariah states" that the United States seeks to marginalize such as Sudan, which has led to creating tensions with the new Chinese policy (Canning,2007).

The Chinese company has been granted agricultural lands within the framework of joint cooperation between Sudan and China in the field of

agriculture, with the aim of moving from the stage of successful agricultural experiments to the stage of cash or commercial production, especially in the field of wheat and maize cultivation (Sudan Tribune, 2015). Chinese national petroleum companies have become new players in the global petroleum industry in the past two decades. Since it lacks sufficient experience in competing with other international companies in managing huge oil fields, with little experience in political risks and security, it has gained from its experience in Sudan a competitive role in global strategy and in developing its capabilities (Patey,2017).

This relationship was clearly demonstrated in Beijing's relationship with the ruling National Congress Party in Sudan by including China in domestic policy and foreign relations in the war in Darfur. Beijing responded to this through its political role. China also developed new relations with the state of South Sudan following the 2005 peace agreement, which was prompted by political requirements related to investment protection (Large,2009).

The distribution of freshwater resources is characterized by unevenness and irregularity, as there are regions in the world that are scarce in freshwater. This is critical since water and its supplies are likely to become targets for military action and tools of war with the increase in population, improvement in living standards, increased demand for freshwater, and global climate change (Gleick,1993). Several questions are raised about the relationship of conflict over water to other types of conflict, such as ethnic conflicts, and the existence of important differences between conflicts over resources and conflicts arising from the deterioration and pollution of freshwater sources, and that conflict over scarce water sources is the source of global conflict as it contributes to the intensification of conflicts that emerge from other sources (Haftendorn,2000). The problem of international conflicts over water is not due to war, but rather due to unsustainable development resulting from the absence of joint cooperation, which is followed by poverty, migration, and internal national conflicts (Mason,2004).

The Nile River Basin is considered the most unique among the international river basins and represents the most challenges due to its remoteness and its display of a level of unbalanced development across its basin. In addition to that, there is a complete absence of meaningful cooperation and a comprehensive agreement between its countries. This negative phenomenon, which is limited to the Nile, has become an obstacle that has led to the lack of the desired cooperation, development with joint projects, and investment in the basin. The final result is that the river does not contribute to the well-being of about 300 million people living along it, as they are considered the poorest in the world, in addition to the fact that five of the ten least developed countries in the world are located here (Oloo,2007).

In colonial times, the Nile's waters were regulated by agreements drawn up and supported by British rule, which suited the Egyptians, and to a small extent the Sudanese, by giving them the presidency in controlling the great river. This situation began to change in the 1960s with the end of colonial rule in the region, and these challenges have begun to emerge again in the present years with the awakening of the East African community. Kenya, Uganda, and Tanzania (members of the EAC all have a common interest in facilitating the economic development of the Lake Victoria Basin, and expanding this could give them an incentive to bring long-awaited issues to the regulators governing the use of the Nile's waters. Despite the passage of a century of water regulation projects in the Nile Basin, Egypt faces a real water supply crisis due to the combination of drought and overuse by the people of the basin countries (Smith et al. 1990).

The Nile River has been a source of life and conflict in the Nile Basin for centuries (Berry,1995). The deterioration of its waters has shed light on the issues of water scarcity and tensions between the countries of its basin that depend on sharing their share of its total waters (Wiebe,2001). It is possible that Egypt will search for new sources of water or reposition existing supplies and reduce demand at the same time. It is unlikely that these actions will be completed without internal and external conflict (Smith et al. 1990).

The 1959 agreement governed the distribution of Nile water between Egypt and Sudan and left the remaining countries without determining their shares. Sudan has been caught between the 1959 agreement with Egypt and economically beneficial cooperation with Ethiopia, the source of most of the Nile's water, which seeks to increase its share of the water to secure food and facilitate economic development. The people of the Upper River are looking to escape from the restrictions on water development placed on them by the current regime, but they all fear Egyptian retaliation. The rapid population growth in the region often controls the continuous search for food security and thus water to meet the growing demand of the population.

National policies in the Nile Basin consistently ignore the fact that the people of the Nile Basin are bound together by their sharing of environmental resources. Water resources for irrigation and hydroelectric power are limited, and erosion upriver affects the percolation of dams downriver, where drought and floods know no political boundaries.

For most of the twentieth century, the Nile River was viewed as a source of political tensions and low-intensity conflicts between three of the basin countries: Ethiopia, Sudan, and Egypt. Moreover, the emergence of China as a major player in the Nile Basin's power politics has facilitated several unilateral initiatives for large development projects (Swain,2011). Countries of the Middle East, in their endless battle to match population growth with food and energy production, have developed ways to develop water resources, including international rivers and groundwater, without considering neighbors' needs, which has caused bitter and recurring conflicts. At the same time, the peace process with Israel collapsed and the Soviet Union collapsed, suggesting that the Middle East was entering a new era (Soffer et al.1999).

References:

- Abdelmawla, M.A. .2014. The impact of Zakat and knowledge on poverty alleviation in Sudan: An empirical investigation (1990-2009). J. of economic cooperation and development 35 (4):61-84.

- Abu Saleh, Muhammad Hussein Suleiman. 2020. Is Sudan subject to blackmail? Social Media.

- Al-Sahli, Nabil. 9/19/208. Presentation of the book: Sudan and the Future of Geopolitical Conflict, by Abu Iskandar Al-Sudani - Publisher, Al-Ghad Al-Arabi Center for Studies - Damascus - First Edition 2008. Al-Jazeera www.aljazeera.net

- Berry, L.1995. Physical and social geography. Africa south of the Sahara. 24th edition, Staplers Printers Rochester Ltd, Kent, UK.

- Broughton, A. 2012. Land grabbing: A new colonialism. International journal of socialist renewal. Links.org.au

- Canning, C. 2007. Pursuit of the pariah: Iran, Sudan, and Myanmar in China's energy security strategy. Security Challenges 3 (1):47-63.

- Carmody, P., Taylor, I. 2010. Flexigemony and force in China's resource diplomacy in Africa" Sudan and Zambia compared. Geopolitics 15 (3):496-515.

- Carmody, P.2009. Cruciform sovereignty, matrix governance and the scramble for Africa's oil: Insights from Chad and Sudan. Political Geography 28 (6): 353-361.

- Collins, C. 1976. Colonialism and class struggle in Sudan. MERIP Reports 46: 3-17+20.

- Farah, E.A., Barazi, N.1995. Groundwater resources in a semi-arid area: a case study from central Sudan. Journal of African Earth Sciences 25 (3):453-466.

- Friedmann J. 1966. Regional development policy, a case study of Venezuela. Massachusetts Institute of Technology. The M.I.T. Press, London.

- Gleick, P.H.1993. Water and conflict: Fresh water resources and international security. International security 18 (1): 79-112.

- Haftendorn, H. 2000. Water and international conflict. Third World Quarterly 21 (1): 51-68.

- Huliaras, A. 2006. Evangelists, oil companies, and terrorists: The Bush administration's policy towards Sudan. Orbis 50 (4):709-724.

- Junho, J.2007. China in Africa, from capitalism to colonialism. Asia Times.www.atimes.com

- Kaplan, R.D. 2010. The geography of Chinese power: how far can Bejing reach on land and at sea? Foreign Affairs, 22-41.

- Kok, P.1996. Sudan: Between radical restructuring and deconstruction of State systems. Review of African political economy 23 (70):555-562.

- Large, D. 2007. China and the changing context of development in Sudan. Development 50 (3):57-62.

- Large, D.2009. China's Sudan engagement: Changing northern and southern political trajectories in peace and war. The China Quarterly 199:610-626.

- Mann, H.2003. International investment agreements: Building the new colonialism. Proceedings of the ASIL annual meeting 97:247-250.

- Mason, S. 2004. From conflict to cooperation in the Nile Basin: Interaction between water availability, water management in Egypt and Sudan, and international relations in the Eastern Nile basin. Doctoral thesis, Swiss Federal Institute of Technology ETH Zurich.

- Oloo, A. 2007. The quest for cooperation in the Nile water conflict: the case of Eritrea. African Sociological Review 11 (1):95-105.

- Patey, L. 2017. Learning in Africa: China's overseas oil investments in Sudan and South Sudan. Journal of Contemporary China 26 (107): 756-768.

- Selby, J., Hoffmann, C. 2014. Beyond scarcity: rethinking water, climate change and conflict in Sudan. Global environmental change 29: 360-370.

- Smith, S., Al- Hawahy, H.M. 1990. The Blue Nile: potential for conflict and alternatives for meeting future demands. Water International 15 (4):217-222.

- Suliman, M. 1977. Civil war in Sudan: The impact of ecological degradation. Contributions in Black Studies 15 (1),7. https://scholarworks.umass.edu.

- Suliman, M., Stiftung, E. et al.2005. Ecology, politics, and violent conflict. Sudanese Journal of Human Rights Culture and issues of cultural diversity, issue 1: 1-25.

- Swain, A. 2011. Challenges for water sharing in the Nile Basin: changing geo-politics and changing climate. Hydrological Sciences Journal 56 (4):687-702.

- Tony B, Abdelkarim, A. 1991. Sudan: The Gezira scheme and agricultural transition. Psychology Press. Amazon.com.

- Verhoeven, H.2015. Water, civilization, and power in Sudan: The political economy of military-Islamist state building. Cambridge University Press.

- Wiebe, K. 2001. The Nile River: Potential for conflict and cooperation in the face of water degradation. Natural resources journal, 731-754.

- World Bank 1990. Sudan, towards an action plan for food security, stimulating growth and targeting interventions. Report 8167-SU. Agriculture operations division, Eastern Africa Dept. African Region, WB, Washington.

11

The Emergence and Intellectual Bases of Sudanese Political Parties

11

The Emergence and Intellectual Bases of Sudanese Political Parties

The geographical composition of Sudan has taken the form of a unified state with rebellious parties since it settled during the British colonial period. Sudan is considered an exceptional country in the true sense of the term. Since it is one of the largest countries in Africa and the Middle East, it includes distant borders of cultural and geographical regions. Its 597 tribes speak more than 400 languages and dialects and practice multiple religious traditions that combine Islam, ancient African beliefs, and Christianity, in that quantitative order. In addition, the mixing between the Hamites, the Semites, the Nilotic, the Bantu, and other ethnic groups resulted in one of the most heterogeneous societies in the world, which is thus a miniature "universe" of the continent of Africa.

Since its independence from British rule in 1956, Sudan has not witnessed political stability, as the political parties have not succeeded in creating an agreed-upon political system through which all components of the country can practice their political activity according to agreed-upon principles.

1. The emergence of political parties in Sudan

Sudan was a playground for two competing powers in the nineteenth century, the Ottoman Empire and the nascent Ethiopian Empire, so the relationship system between them became more complex and different (Marchal. 2010). Sudan is considered the first African country to successfully revolt against colonialism when the Mahdi took up arms against the Turks in 1881 AD and established an independent state. When the Mahadism revolutionary state came, it did not succeed in

establishing a civil government system based on the presence of political parties. After the end of the Mahadism rule, the Sudanese surrendered to English colonialism peacefully, but they quickly developed a degree of political and administrative awareness and awareness that qualified them for self-rule and independence before the winds of change blew in Africa.

A specific style of governance was not agreed upon in the period preceding independence, as it was characterized by a "we divide, they rule" nature. The year 1924 AD is considered a turning point in contemporary Sudanese history, as some Sudanese unionists and Egyptian nationalists planned an armed insurrection against the government, aiming to include the entire country in the hope of expelling the British from Sudan and opening the path to unity between Egypt and Sudan (El-Amin,1986). The idea of Mahdism continued to flourish even under colonial rule despite the fact that the British rulers treated it with suspicion and preferred Sayyid over al-Mirghani, the leader of the quieter Khatmiyya Sufi order, docile it. The defeat of the Umma Party in the first general elections in 1953 by an alliance of secularists and the Khatmiyya who supported them was only a temporary setback. Upon Sudan's independence in 1956 AD, Mahadism supremacy was challenged by the Khatmiyyah and other groups, but broad support among the Ansar, an Islamic political movement, enabled it to gain political control.

The Sudanese political parties emerged as organizations that initially mortgaged themselves to realize and understand the independence of Sudan through several different ways and means (Cudsi, 1978). Party movements existed during independence, including the political movement based on sectarianism (the Umma Party, the Brothers, which became the National Unionist Party before the People's Democratic Party split from it), and the movement the non-sectarian Islamic movement based on the Islamic elite (the Charter Front Party) and the leftist movement (the Sudanese Communist Party), along with the liberals, independents, Republicans, and regional political forces, especially the southern political forces.

Sudanese politics was formed under the influence of the intellectual currents of these disparate parties, considering Sudan a “microcosm” during the twentieth century as a result of the intersection of many key elements in modern African history and Middle Eastern history. The continuing dynamic demand for Islam, the growth of modern nationalist movements, and the emergence of some ideologies such as communism have played an important role in the contemporary history of Sudan (Voll,1980). A number of factors have contributed to the emergence of political parties in Sudan (Cudsi,1978). First, there was a lack of agreement and discord conflict between national constituencies regarding the perception and awareness of the most appropriate means for Sudan’s independence. Some patriots adopted a militant approach, while others sought to achieve their desired goal through cooperation with the colonial government despite their opposition to it. In this context, the militants gained the upper hand, but as the conflict with the government developed, they turned to Egypt to seek support. The lack of agreement accompanying Sudan’s political relationship with Egypt exacerbated further divisions in the national movement. Secondly, the economic difficulties that prevailed in Sudan during World War II created anxiety and discontent among various population divisions. The activists exploited this situation to mobilize political support for their demand for the direct and influential contribution of the Sudanese to the government of their country. Third, the competition between the two main religious leaders served as another channel for national conflict to spread among the rural population. Unlike the leader of the Khatmiyya sect, Sayyed Abd al-Rahman al-Mahdi had clear political ambitions. In light of the evolving debate over Sudan’s relationship with Egypt, political topics have become inevitably intertwined with non-religious (secular) interests and desires. Fourthly, British and Egyptian trends and aspirations towards the political future of Sudan influenced nationalist commitments. The British orientations conveyed the impression that they did not aim to guarantee independence for Sudan, but rather to extend the duration of the dual rule somewhat. On the other hand, as for the Egyptians, they spoke of a free and united Nile Valley, with the internal administration of Sudan as its own.

Accordingly, Sudanese nationalists were divided over whether or not union with Egypt was the shortest path to independence.

2. Intellectual currents of the main Sudanese political parties

The main Sudanese political parties included the two main traditional parties, namely the Umma Party, and the Brothers Party, which became the National Unionist Party before the People's Democratic Party split from it, and the leftist movement (the Sudanese Communist Party), along with the Islamists, liberals, Independents, Republicans, and some regional political forces. Our topic will be limited to some of them.

2.1. Sudanese Communist Movement Thought:

International communism worked to rid the Islamic world of the control of the imperialist European countries, the first of which was Great Britain. In one of the reports of the British Intelligence Office in Sudan in the mid-twenties, Bolshevism aimed to destroy capitalist empires such as Britain and France in the hope of establishing a Bolshevik government on these ruins. Special consideration was given to Egypt and Sudan, which witnessed two uprisings against the British in the years 1919 and 1924 AD, and they demonstrated positive tools in dealing with Britain and inflicting painful blows. They also provided international communism with an opportunity to try to weaken Britain not only in that part of the world, but in all the British colonies (El-Amin,1986). In the mid-1920s, British intelligence was always afraid that Sudan would fall into the orbit of Moscow's global communist operations, as Egypt was one of the centers of these operations. Bolsheviks believed that they could adopt two tactics on this issue. The first tactic involves Bolshevik influence limiting itself to developing and fostering any revolutionary subversive tendencies it finds ready to conduct in Britain in opposition to any local discontents. As for the second tactic, it directed the Bolshevik agencies in Cairo to form a temporary alliance with the local components of Egyptian nationalism, not forgetting their long-term goal because although Egyptian nationalism is a

bourgeois movement, its orientation is considered preferable to the Bolshevik policy of reducing the position of Great Britain. To implement these tactics, the Bolsheviks entered into a separate alliance with the Wafd Party and the Nationalist parties (El-Amin, 989).

British intelligence in Khartoum accused the Egyptian National Party - like the Wafd Party - of entering into an alliance with international communism for the purpose of influencing the Sudanese uprising in 1924 AD, led by the White Banner Society, and turning it into an anti-British movement, thus serving the purposes of Egypt and Bolshevism by weakening the British in Egypt and Sudan. But in reality, there was no sympathy from the Egyptian National Party for international communism to play a role in these issues, which led to the failure of the intelligence report (El-Amin,1992).

Sudan knew communism directly during the 1940s through Egypt and Herbert Storey. Egyptian communism passed through two stages, the first of which was in the 1920s under the leadership of Joseph Rosenthal and the Alexandria Group, where it emerged first as a social movement and then secondly as full-fledged communism. During this period, it affected some educated Egyptians, some trade unions, and a small number of workers. It also tried, despite its failure, to include the international communist “Comintern” to act as its official representative in this part of the world, and accordingly assumed for itself the role that the organization had previously entrusted to the communist parties in the colonial European countries. The efforts of Egyptian communism during the first phase received a fatal blow in the mid-twenties at the hands of Saad Zaghloul, the leader of the Wafd Party when he began to view the activities of the communists as a serious challenge to the Wafd Party’s control in Egyptian politics (El-Amin,1987). The leaders of the communist world at that time divided the small number of African communists into six well-known parties, of which there were four in Sudan, three in Morocco, and two in South Africa (Kolarz,1962). Through Al-Fajr magazine, Arafat Muhammad Abdullah tried to shape the world around him without

meeting the few conditions for success, by giving the causes a heroic quality. This conflicted with his previous union convictions with Egypt, as he became an enemy of it and its policies in Sudan. Three books have been published in the past few years dealing with communism in Sudan, one of which was published based on Sudanese Communist Party documents from the British Communist Party (El-Amin,1986).

The Sudanese Communist Party came into existence in an organized form in Egypt at least half a decade before it developed in Sudan. In the early 1940s, a section was formed within the Egyptian Movement for National Liberation, one of the many communist organizations at that time, and included Nubian and Sudanese elements to look into the interests of Sudan. Henry Curiel, even before the clampdown on the communists by Sidqi Pasha in 1946, was accustomed to placing a heavy burden on the Sudanese section to bear much of the work of the communist movement. For most of the time, the Omdurman Group and its wing, "Omdurman," were among the most active institutions among Egyptian communists, especially the center-left, which was under the control of Curiel. Sudan has always been the Achilles heel of the Egyptian bourgeois political parties, as this institutional weakness was largely responsible for the "schizophrenic" tendencies of those parties towards their citizens. In their hearts, these parties agreed that Egypt would win over Sudan (El-Amin,1996).. The Sudanese Communist Party was founded in 1946 and its early agitation began among railway workers and students, where its social bases were largely located among the modern sector of society in Sudan. The "bourgeois parties" did not achieve a majority in the "traditional sector" only. The Communist Party defined the traditional sector's shackles as one of the problems that led to the 1958 coup. The measures taken against the Sudanese Communist Party after the 1964 revolution limited its activity and encouraged the bourgeois parties to push the religious factor deeply. More in politics in order to protect its interests against popular mass movements (Al Gaddal,1995).

2.2. Sudanese Islamic Current Thought:

The Muslim Brotherhood movement was Egyptian, originally started by Hassan al-Banna in Ismailia in 1928 AD. It spread very quickly, especially among the lower middle class, and gradually became a political movement despite not establishing a political party and participating in the war between Israel and the Arabs in 1948. Some Sudanese students studying in Cairo began in the 1940s a branch of the Muslim Brotherhood, including Jamal al-Din al-Sanhouri and Sadiq Abdullah Abdul Majid, who were sent by the Egyptian Muslim Brotherhood movement in 1946 AD to attract members to it in Sudan. They succeeded in establishing branches in various small cities in 1947/49, but they were prevented from operating openly unless they declared their independence from the Egyptian Muslim Brotherhood, as they were considered illegal at that time. One of the first pioneers of this group in Sudan was Al-Saim Muhammad Ibrahim, a former teacher at Hantoub Secondary School, who founded the Islamic Liberation Movement at Gordon College in 1947 AD to fight communism. Leaders of the Muslim Brotherhood movement in Sudan, such as Babakir Karar and Muhammad Yusuf, called for the establishment of an Islamic social state (Warburg,2006).

Hassan Abdullah Al-Turabi points out the necessity of distinguishing between Islamization using the corrective tools of the state and the process of conversion to Islam, which was a major part of Sudanese history during the past five centuries. This has been considered in the political frameworks in which Islam occurred, and some have investigated the nature of the legal impact of this dramatic and far-fetched development (Lobban,1990). The growing influence of the Islamic Movement in Sudan became possible as a result of many factors, including the liberal views of its leader, Hassan al-Turabi, and the opposing views of the elite, which played a role in changing the movement from being centered around the elite to a more mainstream political movement. There is no jurisprudential authority or legacy from the Islamic religion to rely on as a model for Islamic governance. The point of

view of the Islamic movement towards the role of women in social life has changed, as it played an important role in supporting its position among educated women in Sudan, and in the advanced organizational structure and renewed strategies among students, the military, and union members, which played a role in the presence of this movement among them. The emergence of Islamic economic institutions, such as the Faisal Islamic Bank, has also supported the political scene in Sudan in favor of the Islamic movement (Abdelwahid,2008).

2.3. Republican Current Thought:

Mahmoud Muhammad Taha came from a humble background of farmers from the small city of Rufa'a. He received a "secular" primary education and later received higher education at Gordon Memorial College, where he graduated as an engineer. His studies at Gordon College had a far-reaching impact, not only on his financial life, where he graduated as an engineer but more importantly on his ideas and visions towards Islam and social issues that were influenced by Western ideas. When he founded the Republican Party in 1945 AD, he chose the name "Al-Jumhuri" for it due to his desire to distinguish himself by offering an alternative to the two major existing political parties, which are the Umma Party, which is supported by Al-Ansar and Abdul Rahman Al-Mahdi, and the National Unionist Party (later the People's Democratic Party), which is supported by Al-Khatmiyyah and Ali Al-Mirghani.

The Republican Brotherhood has put forward this idea of theirs as an alternative to the Sufi orders in Sudan, and thus they do not deviate from the mantle of Sufi thought rooted in Sudan and the roles it played in the Islamization of Sudan, according to what Mansour Khaled pointed out, "The African Islam played an important role in the Islamization of our country...The country of Africa is the region that begins from Tunisia and ends on the African plain with its historical kingdoms: Mali, Kanem, Sangay, Timbuktu, and Wa-Dai. The rays of that Islam emanated from Kairouan....From the Mosque of Uqba, these rays dispersed and spread, sending their light and heat to Zaytouna in green Tunisia,

the Tijaniya castles in Ain Madi in Algeria, the University of Al-Qarawiyyin in Fez, and the clerics of scholars in Sanhaja, Chinguetti, and Timbuktu. These are the first centers from which Sufi Islam invaded the Great Sudanese Plain (the African Plain). Then from there to what was known as Egyptian Sudan before ending up in English Sudan. Without denying the role played by the Sufis of that time who came to Sudan from the East (the Land of the Two Holy Mosques) and from the north (Egypt), the Sufis of Islamic Africa had the highest praise in transmitting Islam. For Sudan: Al-Qadiriyah with its bellies and thighs, Al-Tijaniya, Al-Shadhiliyya Al-Jazuliyya. These sheiks settled in our country, starting with Western Sudan (Darfur and Kordofan), then they later spread throughout its flat centers"(Khalid, 2011).

The Republican Brotherhood announced their call for a renewal of Islam so that it would be in line with the humanity of the twentieth century. Mahmoud Muhammad Taha contributed in the early days to Sudan's resistance to colonialism, but he quickly transformed his movement into an effort for religious reform, relying on his radical reading of the Qur'an (Howard,2016) by restoring a comprehensive and mystical understanding of Islam, which It ends traditional legal discriminations against women and non-Muslims and that there is a dialectical confusion between law and religion or "mysticism" (Thomas,2010), "Sharia is undemocratic, capitalism and inequality are discriminatory.... It is not the whole of Islam, but just a phase of Islamic law. We believe that it is not only impossible rather, it is imperative to reinterpret the Qur'an and understand the Sunnah. The past period of Sharia law was merely a transitional phase. The golden age will come... when Islam is preached and accepted as a free, tolerant, just, democratic and socialist system where men and women are equal and free to embrace any religion, they want...". Based on this promise, a group of Muslim reformists or reformists in Sudan presented a new concept of Islam, which they say has come (Magnarella,1982). The British viewed Mahmoud Muhammad Taha as a radical, and he was imprisoned in the late 1940s. Imprisonment is considered an important difference in his life, as he went through a spiritual experience and transformed from

a “materialistic” thinker to a “spiritual” thinker so that the experience developed into a religious belief based on a new interpretation of the Qur’an (Moore-Harell,2011).

Mahmoud Muhammad Taha’s interpretation relied on the renewal of the Meccan Qur’an as original ideas and ideals in Islam. One of his most important tasks was how to present Islam with equality between men and women and between Muslims and non-Muslims as citizens of the same state and having equal rights, as republican thought is considered a social movement in which the equality of women and men is practiced (Howard,2016). The real importance of the trial and execution of Mahmoud Muhammad Taha comes from the questions it raised about the place of Sharia in the modern world. What is particularly important here is the relationship between a Muslim’s sincere belief and its compatibility with the content of the purporting laws that are derived from that belief. The tension between doctrine and legalism is often evident in the principle of apostasy in Sharia law. Clear and direct acceptance of this extreme, limited, or narrow-minded religious element or factor is a basic requirement for the success of any attempt to ensure full respect for freedom of religion (An-Na’m, undated).

2.4. The current thought of regional movements:

Since the 1960s, Sudanese politics has witnessed the emergence of many regional movements. When studied and examined, it becomes clear that it is not surprising that Sudan is a large country with great cultural pluralism, bound only by imaginary borders imposed on it by colonial rule. The emergence of regionalism as a political factor is a relatively recent phenomenon that needs to be studied and analyzed against its specific historical background (Kurita, 1994). African labor movements inevitably involved themselves in the struggle against the colonialism that spread across the continent in the post-war years. The workers were one of the few organized groups in society. The strategic position it enjoyed in the modern economy and in urban centers, and the natural aspirations and hopes of workers as ordinary citizens, made their entry into national politics unavoidable. There was

a generalization that assumed the importance of the role of workers in national politics. In the post-independence period, it was rare for African trade unions to be tools of political parties to the extent that their role in the political scene was ignored ((Taha, 1976). The role of trade unionism and the working class in the development of Egyptian nationalism was studied during the first half of the twentieth century. The dialectic of class and people and the formation of a new class of paid workers constituted an important axis given that Egypt had experienced a special type of capitalist growth, and the loyalty of workers to various forms of awareness, organization, and collective action was placed within a political-economic framework that was built and structured by relying on the reality of foreign sovereignty and the struggle for National independence (Beinin et al. 1998).

The meaning or purpose of national liberation movements for African politics came as a result of the successes of contemporary wars such as the liberation wars of Zimbabwe, Mozambique, Angola, Guinea Bissau, and Namibia, that is, wherever white minority governments were entrenched. Revolutionary nationalism developed widespread popular participation in its wars with these regimes. These types of heroic resistance became famous and created a dynamic revolutionary culture that produced a national unity of resistance. At best, these nationalist movements found popular support despite their rare participation, while at worst, power shifted to the local traditional elite or the bourgeois classes, who were nothing more than copies of their former masters, as their control was well preserved due to the important factor of change in the economic structure (Woodward,1981).

Some academic circles present armed conflicts in Africa within the framework of ethnic conflict within weak states, but the local conflicts in Sudan are not only linked to that, but rather have a connection and overlap with the interests of successive governments, opposition groups, and rebel organizations in the region of which Sudan is a part. There are intertwined relationships between the conflicts in Sudan and Chad linked to the 2005 peace agreement and the Sudan People's

Liberation Army. This confirms the necessity of not only taking the state as a unit for analyzing conflict, but rather it is necessary to study the regional field in which conflicts occur as well (Grawert,2008).

References:

- Abdelwahid, M. 2008. The rise of the Islamic movement in Sudan 1945-1989. Dissertation, Auburn University, Alabama.
- Al Gaddal, M.S. 1995. "The Sudanese communist party and liberal democracy: 1946-69" In African Studies in Social Movements and Democracy/ ed. By Mahmood Mamdani and Ernest Wambadia-Wamba. Dakar: Codesria, pages 69-98.
- An-Na'm., A.A. undated. The Islamic law of apostasy and its modern applicability: a case from the Sudan. Religion 16 (3): 197-224.
- Beinin, J., Lockman, Z. 1998. Workers on the Nile: nationalism, Islam, and Egyptian working class,1882-1954. American University in Cairo Press.
- Cudsi, A.S. 1978. The rise of political parties in Sudan, 1936-1946. SOAS University of London
- El-Amin, M.N.1986. The impact of the Fajr School on Sudanese Communism. Sudan Notes and Records 62:1-24.
- El-Amin, M.N.1986. The impact of the Sudanese unionists on Sudanese communism. Middle Eastern Studies 22 (3):418-434.
- El-Amin, M.N.1987. The role of the Egyptian Communists in introducing Sudanese to Communism in the 1940s. British Journal of Middle Eastern Studies 19 (4):433-454.
- El-Amin, M.N.1989. International communism, Egyptian Wafs party and the Sudan. British Journal of Middle Eastern Studies 16 (1):27-48.

- El-Amin, M.N.1992 Was there an alliance between the Watanist (nationalist) party, communism, and the white flag league in Sudan? British Journal of Middle Eastern Studies 19 (2):177-185.
- Grawert, E. 2008. Cross-border dynamics of violent conflict: the case of Sudan and Chad. Journal of Asian and African Studies 43(6):595-614.
- Howard, S. 2016. Modern Muslims: a Sudan memoir. Ohio University Press.
- Khalid, M. 2011. Mansour Khalid writes about Aziz Batran. www. Alrakoba, net. Arabic.
- Kolarz, W.1962. The impact of Communism in West Africa. International Affairs (Royal Institute of International Affairs 1944-) 38 (2):156-169.
- Kurita, Y. 1994. The social bases of regional movements in Sudan 1960s-1980s. In K. Fukui and J. Markakis (eds), 202-216.
- Lobban, C.F. 1990. Islamization in Sudan: A critical assessment. Middle East Journal 44 (4):610-623.
- Magnarella, P.J.1982. The Republican Brothers: A reformist movement in the Sudan. The Muslim World 72 (1):14-24.
- Marchal, R. 2010. The regional dimension of Sudanese politics. Head, 79.afroline.org
- Moore-Harell, A.2011. Islam's Perfect-Stranger, the life of Mahmud Muhammad Taha, Muslim reformer of Sudan. Middle Eastern Studies 47 (4):683-685.
- Taha, A.R.A.1976. Nationalism and labor in the Sudan: The influence of Communism. Sudan Notes and Records 57: 81-89.
- Thomas, E. 2010. Islam's perfect stranger: the life of Mahmud Muhammad Taha, Muslim reformer of Sudan. Bloomsbury Publishing.

- Voll, J. 1980. Islam, Nationalism, and Communism in a traditional society: The case of the Sudan. The international journal of African historical studies 13 (1):177-179.
- Warburg, G. 2006. The Muslim Brotherhood in Sudan: From reforms to radicalism. Project of the research of Islamist movements (PRISM)
- Woodward, P.1981. Nationalism and opposition in Sudan. African Affairs 80 (320):379-388.

12

The Failure of Political Parties to achieve Political Governance in Sudan

12

The Failure of Political Parties to achieve Political Governance in Sudan

After we reviewed the features of the intellectual structure of some Sudanese political parties, we will discuss in the remainder of the article the challenges of the failure of political parties to achieve political governance by creating a stable political system in the country. These challenges are related to the remnants of British colonial policy, development challenges, and some cultural policies towards some Sudanese regions.

Some of Sudan's political problems are attributed to colonial policies, but many of them were created by the ruling elite after the departure of colonialism (Ahmed, 2010). British colonialism worked to exploit religion to tear apart national unity in Sudan. Christian missionary campaigns in South Sudan were working to spread Christianity and incite against the Islamic religion and portray it as a racist religion (El-Buni, 1996). Thus, religious differences in Sudan became one of the causes of conflict and political instability, as Muslim attempts to implement Islamic law - the religion of the majority - led to opposition from non-Muslim minorities, especially in South Sudan, because the colonial policy previously mentioned led to the South being "composed from a majority that adheres to tribal religions, a Muslim group, and an educated southern elite that sees its African and English culture as a source of Arabization, and its Christianity as a source of Islam, and together they have a distinct identity (El- Mahdi,1982).

The linguistic aspect took place in the colonial project to create ethnic units, "tribal units" and self-contained "enclosed areas" in Sudan. The colonial policy towards the Nuba aimed to build false tribal ethnic identities for them in the Nuba Mountains. Language and education were

the tools used to complete this innovative project. The state-directed linguistic policy paths in Sudan have strategically moved the traditional linguistic-educational and socio-linguistic framework as a means of imposing nationalist ideologies. Through the social framework burdened with tensions and contradictions in Sudan, graphic representation was chosen, which is considered a mood for political movement. Therefore, education is considered an inherently ideological practice. There is an overlap in the content of colonial and post-colonial linguistic policies, where discursive resources have been manipulated as sites of social resistance over the distribution of material resources in Sudan (Abdelhay,2010).

After the end of colonialism, the Sudanese inherited a country divided and encapsulated by false borders that forcefully brought together “Arabs,” Muslims, “Africans,” Christians, and other religions (Ibrahim,2000). When other African countries became independent in the glow of parliamentary luster, Sudan changed its democracy into a military dictatorship (Gretton,1968). In October 1964, the Sudanese military government shed a little blood and rebuilt a parliamentary government when other democracies were climbing toward one-party rule or military dictatorship. The May 1969 revolution was considered a revolution of consensus, and its government in the period 1969-1977 was considered a government of hope and promise, while in the period 1977-1985, it was considered a distorted government, and the April 1985 uprising was considered an incomplete revolution (Khalid1990). Except for short periods when independent Sudan was ruled by the so-called Sudanese secularists in the period 1953-56 when Khatmiyyah joined forces with the forces of intellectuals, and again between 1964 and March 1965 when the country was ruled by an unelected transitional secular government that was stripped of all its powers once it restored the political sectors. The other was political control. Secularism remained under the military dictatorship of Jaafar al-Numeiri between 1969 and 1977 (Warburg,1995). Sufi teachings also found opposition from religious fundamentalists and educated people in northern Sudan (Al-Shahi,1986).

Sudan has witnessed internal wars since its independence in January 1956 and witnessed only ten years of peace in the period 1972-1983. At the heart of these conflicts lies the crisis of national identity. Those who assumed political control of Sudan define themselves as Arabs and Muslims who belong to the Middle East more than to Black Africa, even though they are essentially Arab-Africans. Their physical features resemble the African groups in the region, and their cultures are a mixture of Arab and Islamic cultures, alongside which there are local systems and cultures (Deng,2006). It is possible to understand the difficulty of achieving political stability in Sudan when taking into account the inherent and strong cultural, political, and demographic features that distinguish it (Bechtold,1990). These features are considered a legacy that society uses as a social, political, or economic resource. Heritage is open to interpretation and its value can be understood from different points of view, often reflecting divisions in society. The division or schism of cultural and economic uses also leads to the emergence of a strong conflict of interests (Graham et al.2016). There is a relationship between this formation and political identities due to the existence of a historical institutional hierarchy formed in the political framework of Sudan. This hierarchy enables us to identify the centrality of the historical myth of slavery and colonialism in post-colonial Sudan (Idris, 2005). The disparity in the sources of political thought of the Sudanese political parties resulted in the disparity of visions in political action, resulting in many internal tensions and political dialectics at the regional level (Marchal, 2010).

The unbalanced regional development between “Northern” and “Southern” Sudan is part of the bitter and sad differences between the two regions (Ibrahim,2000). Federalism, rooted in Sudan’s political history, has become a central topic in political dialogue in South Sudan (Johnson, 2014). The “elite” in North and South Sudan, as is the case in low-capacity states, is led by the issue of “nationalism.” (Evlihan, 2007). The confrontations between Africans and Arabs in the Nile Valley are seen as a struggle over nationalism, one rooted in Africanism and the other in Arabism (Wai,981). For a long period of time, reli-

gion was not a factor in the conflict between the Muslims of northern Sudan and the traditional Africans of southern Sudan (Pogge, 2002). In analyzing the conflict between North and South Sudan, traditional schools attribute ethnic, tribal, cultural, and religious causes, and ethnocentrism focuses on the ethnic aspect in all its interpretations of this conflict, which hinders genuine efforts to reduce and manage it (Suliman, 1998). The first civil war between North and South Sudan from 1955-1972 was a collection of ethnic, religious, political, and economic problems that faced Sudan since the advent of Turkish-Egyptian rule in 1821 AD. This conflict included external forces with interests in Sudan (Pogge, 2008).

The civil wars were considered as a form of conflict between contradictory identities, between Northern and Southern Sudan. This is because identity is defined in ethnic, cultural, linguistic, and religious frameworks and shows how people define themselves. The question of identity affects the nature of political, social, and cultural participation in Sudan, where there is a clear anomaly in models of identity conflict. There is the Arab-Islamic model in northern Sudan and the African model in southern Sudan. Although the people of northern Sudan are considered Arabs, they are in fact a hybrid of Arab and African elements, as African physical characteristics prevail in most tribal groups. This occurred as a result of the historical process that classified races, cultures, and religions "classwise" and supported the "passage" into the Arab-Islamic model, which was distinguished vis-à-vis African cultures and races, such that a polarization resulted that relied more on myth than on reality. The identity crisis was further complicated by the efforts of the people of northern Sudan to shape the country according to the Arab-Islamic identity (Deng, 2011).

The Sudanization policy of using the Arabic language and religion by the Sudanese government is considered a conscious and comprehensive abuse of the traditional values, social system, and cultures of the South by the North. The change in linguistic policy reached its peak in 1949 AD when Arabic became the official language of Sudan (Nyombe,1994). The politicization of the Arabic language in Sudan is considered a product of

the practices of British colonialism, which planned to confuse the Arabic language with Islam as a pigmented identity. This process resulted in "Northern Sudan" versus "Southern Sudan". The post-independence rulers supported this colonial linguistic policy (Abdelhay et al. 2011). Over the centuries, an Arabization process took place in Sudan, including the gradual spread of Arab identity and the Arabic language among the northern Sudanese. British colonial policies favored a few elites through the "Arab communities" who went on to consciously develop the concept of Sudanese Arab national identity in the process of adopting the term "Sudanese" derived from the Arabic word Sawad (Blackness). After the end of colonialism in 1956, these nationalists attributed Arabization in the form of an official policy to rapidly propagate the Arabic language throughout the country. This policy contradicts the policy of British rule and was the cause of civil war in South Sudan, the Nuba Mountains, and more recently in Darfur. Aside from Arabization, the Arabization policy has sharpened non-Arab and psychologically conscious African identities, "comprehensive and dual-cultural" in some cases. The Arabization policy was accompanied by the growth of the ideology of Arab cultural and ethnic supremacy, which is most emphasized in Darfur now (Sharkey, 2008).

The matter was not limited to South Sudan only but included the entire country. The elite of the North failed to understand the nature of this change, which caused their inability to know the necessary factors that led to the success of negotiations with the rebel parties (Taisier et al. 1999). The African-Arab conflict in the Nile Valley is seen as a conflict based on nationalism, one of which is rooted in Africanism, and the other is rooted in Arabism (Wai,1981). A process of "Arabization" took place in Sudan over many centuries, which included the gradual spread of both the Arab identity and the Arabic language among the inhabitants of the north. In the period following the victory of the British-Egyptian army in 1898 AD, British colonial policies favored a "small elite" from these "Arab" communities, who worked to develop and develop the concept of Sudanese Arab national identity with clear awareness in a process in which the term "Sudanese" was adopted.

After the end of colonialism, the nationalists were active in developing policies that worked to strengthen the spread of the Arabic language and the process of "Arabization" quickly in geographical borders that spoke their local languages, which contradicted the pre-colonial policies of Arabization. This situation has become linked to civil conflicts in South Sudan, the Nuba Mountains, and Darfur. In addition to spreading "Arabism," the policy of arabizing non-Arab "African" identities consciously intensified, accompanied by a growth policy of the doctrine of Arab culture and racial transcendence (Sharkey, 2008). Likewise, the imposition of colonial values and customs was unsettling for "gender" relations. In less developed South Sudan, men and women relied on grassroots to form their political associations, which organized and supported themselves and forced their organizations to develop strategies to survive the longest civil war in Africa. In the Nile region and the north, which is more urban and developed, where British parliamentary institutions and official laws prevail, people relied more on forming their political organizations on hierarchical organizations such as sectarian nationalist and religious parties in addition to their political affiliation, with the exception of the General Federation of Workers' Unions, which was a hierarchical grouping established by males. Northern women followed the pattern of organizations created by males, forming auxiliary fronts based on grassroots auxiliaries (Ibrahim, 2000).

There are many results that resulted from the political work of Islamists, which greatly influenced Sudanese politics and the political-social conflict therein. The Islamic State in Sudan has declared a distinct doctrine whose declared goal is to create a prototype of the Islamic State (Gallab,2008). Four years after the fall of Jaafar al-Numeiri's rule, the relationship between Islam and the state continued to become a thorny issue in Sudanese politics. The main issue in the protracted Sudanese political crisis remains: either the state declares secularism from the standpoint of the diversity of cultures, ethnic composition, etc., or it becomes an Islamic state to defend the Muslim majority of the northern Sudanese. Sudan gained its independence, like the rest

of the African nations, before the nations themselves were formed. Therefore, the task of forming the nation became the current concern, strongly polarized by social and political forces. Although Islam has always been considered a fundamental topic in Sudanese politics, it would be too simple to view the current conflict in the country within the framework of the "Arab" and "Muslim" north versus the "pagan" and "African" south. Since Sudan's independence, the national debate has developed around three topics, including realizing national identity, sharing political power, and unbalanced socio-economic development (Bob,1990).

Efforts in Sudan to impose an Islamic state and Islamic constitution on a multi-religious and multi-ethnic society led to a long civil war, endless military coups, and political, social, and economic unrest. The Mahadism came in 1881 AD to renew and purify Islam. It was, in fact, an uprising against a corrupt Islamic government, the foreign Turkish-Egyptian ruling elite (Warburg,2003). Sudan achieved an Islamic revolution without violence. Through a "creeping" revolution that began in the 1970s, Islamic fundamentalists increased their power through wealth and organized control over the civil service, the economy, the judiciary, and the armed forces. In fact, we find that the main political parties in the north, with the exception of the Communist Party, have sided with religious parties, as this does not mean that all Muslims support Sharia. Fundamentalists make up 20% of Sudan's Muslim population, but they are wealthier and more motivated. The implementation of Sharia'a was accompanied by the strengthening of dictatorial rule, the weakening of institutions, the crushing of civil liberties, the escalation of the civil war in South Sudan, and the worsening of economic ills. The revolution has caused concern in Washington and some Arab and African countries, but there is no evidence yet that Sudan poses a direct threat to its neighbors (Lesch,1995).

One of the most prominent elements from the April 2010 elections is the significant absence of the traditional religious parties that have dominated the political scene since independence, and the strength-

ening of the military-Islamic alliance in Khartoum since 1989. This outcome is considered a result of the combination of the effects of state policies followed during the last two decades and long-term social changes. The absence of the "sectarian system" created a structural change in the country's political development, which was apparently characterized by an inescapable circular process between unstable democracy and military governments. The elections failed to meet the hopes and aspirations of those who hoped that they could create an inclusive political space and make unity attractive (Musso,2012).

In Muslim northern Sudan, there are two transitional institutions with regard to gender and sexuality: the Sudanese Communist Party and its affiliate, the Sudan Women's Union, and the Muslim state, represented by the National Islamic Front, which is the former Muslim Brotherhood and later the National Congress Party. These two social institutions are considered important poles in the Sudanese political spectrum and in their relationship with women. The Sudanese Communist Party is characterized by progressivism, secularism, and non-discrimination by gender, while the National Islamic Front is considered conservative, religious, oppressive for women, and traditional, neither secular nor gender-just (Hale,2005). Sudanese women followed different methods that helped introduce the "quota" for women in 2008 and implemented it in the parliamentary elections in 2010. One of the biggest achievements of the quota system was to help increase the involvement of women in political work and not just increase their representation in Parliament. It also posed a challenge to political parties in fielding female candidates in core geographic constituencies.

Political change in Sudan after 1989 AD led to a gathering momentum with the government introducing policies of control and restrictions on one side, and the increasing numbers of civil society organizations looking to establish and legitimize their control and identity and ensure their continued existence on the other side. The Islamic Front used religion and force to perpetuate and protect the political system that had lost its credibility and legitimacy among many Sudanese. The National

Islamic Front emerged as a small political party, and over a period of time it became the third political force after the 1986 elections, and then became a ruling party at the dawn of the military coup in 1989.

The emergence of the Islamic movement in Sudan is in itself a reflection of the deterioration of local initiatives related to social change (Ali,2010), as the relationship between the deteriorating economy and the political crisis in Sudan bears the social foundations of political Islamic movements and the class patterns of businessmen and organized workers (Abdel-Rahim,1986). The Resurgence experienced by the Sudanese radical Islam group, the National Islamic Front, which became clear of its direct connection to the civil war in the south in September 1958, raises some important and pressing questions about the intersection between Africanism and political Islam. The dynamic of the conflict between them is unusual. Although Islam slowly spread throughout most of Africa and intertwined with traditional local institutions over centuries within the framework of a large peace process, some important points emerged from the dynamics of this process and led to the creation of conflicts. An example of this is the Othman Dan Fodio jihadist movement and the Mahdist movement in Sudan. These movements relied on awareness of the discrepancy between the true content of the message of Islam and practice through habituation to the African population, who are largely Muslims in name or nominally. These movements interacted with local forces to create a new form of Islamic observance action. There is a feeling that the current conflict in Sudan has narrative aspects, given that the process of the development of Islam in Sudan is not one-sided and works to bring about the collision of two dissimilar cultures that have gone through the experience of renewal. The introduction of culture as a dynamic external factor is considered a new and important development because of its connection to evolving internal factors (El-Afandi,1990).

Until 1994, the Darfur region, with its five current states, remained a single and integrated political and administrative unit since the founding of the Kira Kingdom in the seventeenth century AD (Takana,2008).

The Collier-Hoeffler framework considers recalcitrant economic opportunity as the causative factor for civil conflict. This framework has been applied in Africa, but it did not provide sufficient tools to analyze the underlying conditions that led to the insurgency in Sudan. Therefore, it is not the rebellious economic opportunity that is primarily behind the rebellion in South Sudan and Darfur, but rather the socio-economic injustice stemming from culturally and regionally imposed political marginalization. This could open a door to understanding this conflict and not limit it to the economic agenda of analysis only (Ylonen,2005). An important political shift occurred in the composition of the state and in power relations, as it put an end to the historical political hegemony limited to the north exclusively following the Comprehensive Peace Agreement between the government and the Sudan People's Liberation Movement in 2005 AD (Ahmed,2009). Usually, either partial implementation or violation of these agreements occurs by one of the parties to the agreement (Ahmed,2010). The attempt to define and distinguish the relationship between the National Islamic Front and the sectarian and secular parties in Sudan must begin with an assessment of the impact of Islam on the Sudanese political scene since the first days in which the Arabized Islamic groups controlled the centers of power in central Sudan (Ahmed,2008).

The Black Book was secretly published in Sudan and had a major impact on political dialogue. The book claimed to seek to introduce the patterns of political control of the people of northern Sudan in the post-colonial period. This is the same vision adopted by many of the rebel movements in Sudan that fight not only as a result of ethnic or religious discrimination but also because of marginalization that neglects the development of the population of marginal regions (Cobham,2006). Violent incidents within groups usually affect political ideas towards members outside the group. Violence deepens hatred and reduces the possibilities of supporting understanding and accepting concessions, while it encourages mediation and cohesion to prevent conflict. It is possible for violence to fuel hatred towards out-groups, according to the results of a study in Greater Khartoum in 2010 and 2011,

where political violence intensifies the negative tendencies of individuals within the group and makes them accept separation in order to avoid living side by side with members from outside the group (Berber et al. 2014). Over the last two decades, the focus of conflict in Sudan has changed from protest against political marginalization, economic conflict, and cultural control of the north to a clash between competing visions.

No one ignores the influence of the tribal aspect in political action in Sudan. Tribalism is usually reproduced in Sudan by virtue of the expansion of the "tribal" logic through political practice since the Turkish invasion in 1821 AD. The difficulty of practicing political work without the influence of the tribal factor has been confirmed (El Zain,1996). Colonial rule with its oppressive policies, independence rule with its ideology of building the nation, and Islamic fundamentalism with its universal ideology all preserved, in one way or another, the tribal factor as an essential component of the political system. In many cases, "tribalism" hides a material façade, and may be cloaked in a religious guise, which may help in understanding and knowing the truth of the current conditions (El Zain,1996). Sudan faces sad crises in its political life, including crises of identity, national unity, and governance.

References:

- Abdelhay, A. K. .2010. The politics of writing tribal identities in the Sudan: The case of the colonial Nubal policy. Journal of multilingual and multicultural development 31 (2): 201-213.
- Abdelhay, A., Makoni, B., et al. 2011. The sociolinguistics of nationalism in the Sudan: The politicization of Arabic and Arabicisation of politics. Current issues in language planning 12 (4): 457-501.
- Abdel-Rahim, M. (ed). 1986. Sudan since independence: studies of political development since 1956. Gower, Aldershot; Brookfield, VT. Africabib. org

- Ahmed, A. G.M. 2008. One against all: National Islamic Front and Sudanese sectarian and secular parties. SWP Working paper. Bergen.
- Ahmed, A.G.M. 2010. Sudan peace agreements: current challenges and future prospects. CMI working paper SWP 2010:1. Michelsen Institute, Bergen.
- Ahmed, E. 2009. The comprehensive peace agreement and the dynamics of post-conflict political partnership in Sudan. Africa Spectrum 44 (3):133-147.
- Ali, B. 2010. Repression of Sudanese civil society under the National Islamic Front/National Congress Party. Review of African political economy 37 (126): 437-450.
- Al-Shahi, A. 1986. Themes from Northern Sudan. Ithaca for the British Society and Middle Eastern Studies.
- Bechtold, P.1990. More turbulence in Sudan: a new politics this time? Middle East Journal 44 (4):579-595.
- Berber, B., Roessler, P., Scacco, A. 2014. Intergroup violence and political attitudes: evidence from a dividing Sudan. The journal of politics 76(3):649-665.
- Blij, H.D..2008. The power of place: geography, destiny, and globalization's rough landscape. Oxford University Press.
- Bob, A.1990. Islam, the state, and politics in the Sudan. Northeast African Studies, 201-220.
- Cobham, A. 2006. Causes of conflict in Sudan: Testing the black book. The European journal of development research 17(3):462-480.
- Deng, F. D. 2011. War of visions: conflict of identities in the Sudan. Brookings Institutions Press.

- Deng, F.M. 2006. Sudan: A nation in turbulent search of itself. The Annals of the American Academy of political and social sciences 603 (1):155-162.
- El- Buni, A.A. 1996. The religious dimension of the Southern Sudan problem. Centre for Strategic Studies, Khartoum, p 31. Arabic.
- El- Mahdi, S. 1982. “the future of Islam in Sudan” in Islam in Sudan. Dar Alasala for Printing and Publishing, Khartoum, p 388. Arabic.
- El-Afandi, A. 1990. ‘Discovering the south”: Sudanese dilemmas for Islam in Africa. African Affairs 89 (365): 371-389.
- El-Zain, M.1996. Tribe and religion in the Sudan. Review of African political economy 23 (70):523-529.
- Evlihan, R.K. 2007. Beyond Creole nationalism? Language politics, education and the challenges of state building in post–conflict Southern Sudan. Ethnopolitics 6 (4):513-543.
- Gallab, A.A. 2008. The first Islamist republic: development and disintegration of Islamism in Sudan. Ashgate Publishing, Ltd.
- Graham, B., Ashworth, G., Tunbridge, J. 2016. Geography of heritage. Routledge.
- Gretton, G.1968. The law and the Constitution in the Sudan. The World Today 24 (8):314-323.
- Hale, S. 2005. Activating the Gender Local: Transitional Ideologies and “Women’s Culture” in Northern Sudan. Journal of Middle East Women’s Studies 1 (1):29-52.
- Ibrahim, F. A. 2000. Sudanese women under repression, and the shortest way to equality. Frontline Feminisms: Women, war, and resistance, 129-39.books.google.com
- Johnson, D. H. 2014. Federalism in the history of South Sudanese politics though. Rift Valley Institute. Refworld.org

- Khalid, M. 1990. The government they deserve: the role of the elite in Sudan's political evolution. Kegan Paul International, London

- Lesch, A. M. 1995. The destruction of Civil Society in the Sudan. Civil society in the Middle East 2:153-191.

- Marchal, R. 2010. The regional dimension of Sudanese politics. Head, 79.afroline.org

- Musso, G. 2012. Electoral politics and religious parties in Sudan: An analysis of the April 2010 election. African conflict and peace-building review 2 (1):58-86.

- Nyombe, B.G.V. 1994. The politics of language, culture, religion, and race in the Sudan. Frankfurter Afrikanistische Blatter, 9-21.

- Pogge, S. S. 2008. The first Sudanese civil war: Africans, Arabs, and Israelis in the southern Sudan, 1955-1972. Springer

- Pogge, S.S. 2002. General Ibrahim Abboud's military administration in the Sudan, 1958-1964: Implementation of the programs of Islamization and Arabization in the Southern Sudan. Northeastern African Studies 9 (1):67-101.

- Sharkey, H. J. 2008. Arab identity and ideology in Sudan: The politics of language, ethnicity, and race. African Affairs 107 (426):21-43.

- Suliman, M.1998. Resource access: a major cause of armed conflict in the Sudan, The case of Nuba mountains. International workshop on community–based natural resource management, Washington DC, 10-14, 1998.

- Taisier, A M., Robert, M. O. 1999. Civil wars and failed peace efforts in Sudan. PP. 193-220. Africabub.org.

- Takana., Y. 2008. The politics of local boundaries and conflict in Sudan. The South Darfur case. Sudan working paper 2008:2. Michelson Institute Bergen.

- Wai, D.M. 1981. The African – Arab conflict in Sudan. African Publishing Company, New York. Africabib.org
- Warburg, G. 1995. Mahadism and Islamism in Sudan. International Journal of Middle East Studies 27(2):219-236.
- Ylonen, A. 2005. Grievances and the roots of insurgencies: Southern Sudan and Darfur. Peace, conflict, and development: Interdisciplinary Journal 7:99-134.

13

Plans of International Imperialism For the Division of Sudan

13

Plans of International Imperialism For the Division of Sudan

Sudan was formed due to historical events that created a geographical composition that differed in its natural environments, ethnic and religious composition, and the political orientations of its population. Sudan was subjected to British colonialism, which was able to formulate a philosophy of capitalist economic development and impose policies of ethnocultural separation on some parts of Sudan, which provided a suitable environment for rebellion and the pursuit of secession. The forces of modern global imperialism have taken this imperialist ground as a base to seek to divide Sudan into small, weak, and warring states in order to be able to exploit its natural and human resources in the service of the plans of political-economic globalization. Hence, this research seeks to review some of the plans of global imperialism and political-economic globalization to divide Sudan since the period of British colonialism in Sudan and the historical periods that followed.

1. The British plan to divide Sudan

The colonial policy towards South Sudan was based on weakening the northern presence in the south and weakening the Arabic language, whether by replacing the Arabic language with English or by encouraging the spread of local dialects and converting them into written languages. It can be said that the great powers were inspired by the idea of secession mainly from the geographical background associated with religion and ethnic groups in South Sudan (El Shair, 2015). To achieve this, the British established a policy of administrative separation (1898-1947) between the North and the South.As well as between the north and the regions of the Nuba Mountains and Anqasna, under the pretext of the existence of geographical, political, historical, and cultural differ-

ences between them. British colonialism exploited religion to tear apart national unity in Sudan. Christian missionary campaigns in South Sudan were working to spread Christianity and incite against the Islamic religion and portray it as a racist religion (Albdel-Alatif, 1996).

The British issued the Closed Areas Law in 1920, and the Passports and Traffic Permits Law in 1922 to ensure the effectiveness of this policy, so that travelers between the north and the south use passports and traffic permits, while specifying the purpose of the visit. They then passed the Permission and Trade Act in 1925 under which Northern Sudanese were required to obtain permission to trade in South Sudan. Finally, the South Sudan Linguistic Policy was introduced and supported in 1928, which adopted English as the official language, approved the use of local tribal languages, and prohibited the use of Arabic in South Sudan.The cumulative effect of these laws was to keep South Sudan separate from its north, and the colonial rulers of South Sudan usually attended conferences in East Africa instead of Khartoum. After establishing the institutions of dual rule, the British continued to strengthen their position in northern Sudan by creating the necessary administrative and political structures for the north. In an effort by the dual government to prepare the south for self-rule, the Northern Sudan Advisory Council Law was enacted in 1943, which included the six northern governorates: Khartoum, Kordofan, Darfur, Eastern, Northern, and Blue Nile. All members of the council were northerners, and that council had no reference to South Sudan. Instead of establishing an advisory council for Southern Sudan similar to that of Northern Sudan, the decisions of the Administrative Conference for Northern Sudan, which was held in Khartoum in 1947, supported the subordination of Southern Sudan to its north. This conference was not attended by the British administrators in South Sudan, who were not satisfied with the decision that came from that conference.

The British concluded their policies towards South Sudan with the Juba Conference in 1948, which approved the subordination of the South to the North. This decision culminated in the establishment of the Su-

danese Legal Assembly in 1948, where thirteen southern negotiators were forced to represent the South in this assembly (Machar, 1995), and the Cairo Conference in 1953 was not an exception. The British had previously considered annexing South Sudan to Uganda or Kenya, but the British rulers of those British colonies refused on the grounds that it would increase burdens on them, especially with regard to the ethnic aspects that distinguish South Sudan from these colonies.

During the colonial period, the Sudanese tried to reject "foreign" sovereignty, which failed in 1924 AD, as the British took the lion's share in shaping the country's fate. At the end of World War II, as a result of the influence of educated Sudanese, like other Africans and Asians, they demanded the right to self-determination. In preparation for achieving destiny, a sample of Western democracy was presented in the form of a consultative council that was limited to northern Sudan only in 1946 AD, and it was followed two years later by the Legislative Assembly, which had more powers. Although these democratic modernizations are considered strange to Sudan and were introduced relatively late,it has remained preserved with traditional institutions.

Until recently, Sudan was composed of a number of tribal units in which there were no social classes or distinctions (divisions), and the head of the tribe did not have a status that differed greatly from the rest of the members of his tribe, and therefore the people were not accustomed to autocratic rule (Hassan, 1967). The new national society in Sudan after the fall of the Sennar Kingdom was tested by the defeat that came from abroad, by the revolution of socio-economic transformations, and by the challenges of contemporary contribution to sub-imperialism, which initially dominated culturally and, in the end, politically over the entire population of modern Sudan. One of this society's important responses to the challenges of this complex era was the invention of a national historical tradition whose members were descended from relatively recent immigrants to Sudan from the well-known Arabs (Eminent Arabs in Islamic Antiquity) (Spaulding, 2000).

In light of the influences of British colonialism, economic develop-

mentalism emerged as an ideology for the Sudanese state in the post-colonial period. As a result of the global change in the tools of economic management and the practice of economic diplomacy, the state transformed from managing the population to managing the national economy based on the principle of individual justice. This ideology was transmitted to the last administrators of the colonial period and then to Sudanese politicians and decision-makers and became a political project for the formation of the Sudanese state, especially in its inability to deal with issues of regional and ethnic justice and civil wars (Young, 2018).It becomes clear when tracing the history and development of colonialism in Sudan (1899-1956), the development of political parties and their allies, and Egypt's efforts to confirm the restoration of Sudan's unity with Egypt, the existence of cooperative relations between imperialism and some local residents (Woodward, 1979). When exploring the origin and growth of the political role of Sudanese businessmen in political and economic development, their alliance with colonialism, to which they remained loyal until its departure from the country, becomes clear. Since independence, the business class and the parties that represent it have opposed radical change to the point that they have no progressive role in the development of Sudan (Mahmoud, 1983).

2. The Israeli plan to divide Sudan

Bilateral relations between Sudan and Israel began immediately after Sudan gained its independence in 1956 AD. It is characterized by being "non-aggressive", secretive, and irregular in nature as a result of the political and economic instability in Sudan due to repeated military coups, internal tribal conflict, and the constant conflict between Islamist and secular groups that are partly blamed for Sudan's irregularity in its international relations. The tension in relations between Sudan and Israel decreases to the extent that Khartoum maintains its relationship with the West.

The Israeli Mossad intervened on behalf of the Anyanya 1 movement in the period 1969-1971, when southern politicians asked Israel to assist them in their conflict with the government of Sudan. The Anyanya has turned into a strong army (Africa News Portal, 2015). The matter was done in complete secrecy until the time came when the conflict took on a global dimension, which Israel used against the Arab peoples and the Soviet Union to draw attention away from it after the 1967 war (Gidron, 1971). Since the end of the fifties, Israel has provided much technical support to Uganda and this continued until 1972 when Idi Amin expelled it and adopted a policy hostile to it (Oded, 2006).

Israeli censorship allowed the publication of details of the role of the Mossad in dividing Sudan and arming the South Sudanese army, and the role of General David Ben Uzael (an Israeli Mossad officer) in building the economic military power of South Sudan (Africa News Portal, 2015). Sudan has constituted a thorny crisis since it entered into force. Following the approach of Gamal Abdel Nasser, the Israelis viewed Sudan as an Arab Islamic state, but in reality, it consists of different ethnic groups and contains millions of non-Arabs. The Israeli "Mida" website indicates that the first South Sudanese ambassador to Tel Aviv, "Ruben Marial Benjamin," when he presented his credentials to the president In December 2014, the Israeli "Reuven Rivlin" handed him a letter that stated: "South Sudan was created thanks to you. The South was born thanks to the State of Israel and General John". Salva Kiir Meredit sent a letter to Benjamin Netanyahu informing him that he had chosen General John as his personal representative in Israel after the secession of the State of South Sudan (Figure 1). There are three reasons why Israel is moving towards supporting the state of South Sudan: strengthening the second circle that Israel built around the Arab countries, which includes Turkey, Iran, Ethiopia, and Kenya, preventing connections between Sudanese army units with the Egyptian army, and helping the southern population in confronting Islamic terrorism, as he described it.

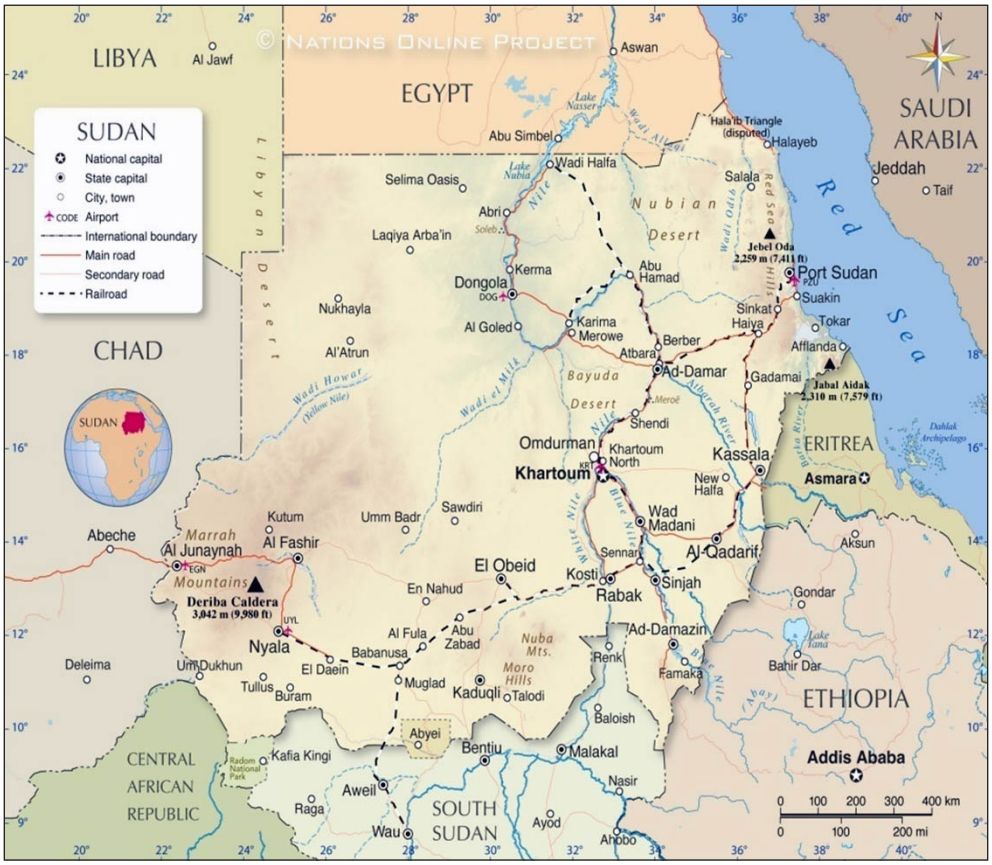

Figure 1: Sudan map in 2011

Sudan's possession of conflicting elements and forces since its geographical construction has coincided with Israel's search for different means of penetrating Africa which it considers part of its ambitions and its need to support African countries in confronting Arab and Islamic countries. Among the fruits of this, for example, was the process of expelling the Falasha Jews from Ethiopia in small numbers between 1979 and 1982, which developed into a major operation between 1983 and 1985, which took place more from Sudan than from Ethiopia where they live. With funding from the American government, Israel, and organizations specializing in supporting the migration of Jews to Occupied Palestine is one of the most important concerns of the Zionist movement (Karadawi, 1991). This was part of the trends that

strengthened relations between Sudan and the international community since Jaafar al-Numeiri seized power in May 1969, which included two stages. The first stage was a short period of symbolic heroic radicalism that preceded the July 1971 coup and was characterized by ideological closeness to the idea of Arab nationalism and fascination with the Soviet Union and Eastern European countries. The second stage was after 1971 AD and was characterized by closeness to the neoconservatives or what was called the pragmatic orientation, which was characterized by subordination to the West. In fact, the continued absence of a strong internal ideology did not encourage the emergence of a well-accepted foreign policy, which hindered the role of political forces at the local level from progressing towards achieving a development ideology relevant to Sudanese reality (Wai, 1979).

The Israeli thinkers see in the book "Israel and the South Sudan Liberation Movement" that the map of Sudan is made up of minorities where there is no single history that unites them, and that Arab unity is a myth. The result of this is that each nationality will have its own state and Israel will become one of the nation-states in the region. Based on that, Israel divided the countries into surrounding countries, including Egypt, Syria, Jordan, and Lebanon, and peripheral countries, including Turkey, Iran, Iraq, Sudan, Saudi Arabia, and Libya. Israel is focusing on non-Arab groups in Sudan to implement its plan, as the first phase ended with the separation of the south, and now the second phase has begun, which depends on creating an industry of creative chaosas a new scenario in all parts of Sudan to separate Darfur, the Nuba Mountains and then the East, relying on the weakness of the Sudanese economy and benefiting from the effects of the economic blockade and the exploitation of extremist groups and ideas to distort the Sudanese political image, which adopts Sharia'a law for rule so that the country reaches the brink of extreme high prices and then collapse (Alawiya Al-Shammar Dictionary, 2013).

Israeli policy moves according to a complex set of declared and undeclared goals.Israel has followed various methods to prevent the Red

Sea from becoming an Arab lake, either by occupying, controlling, and creating instability in it, or taking advantage of global changes and regional balances. It is known that international variables have a direct impact on vital regions in the Middle East and on Sudan in particular, especially in light of the political complexities between the conflicting parties and the search for vital geographical areas. Relations have arisen between the Horn of Africa and the Arabian Gulf region due to the regional extension of the Horn of Africa and its proximity to the Arabian Gulf region, as it had positive aspects such as communication, cooperation, and historical connection, and negative aspects highlighted by international conflicts due to the strategic location of the two regions, which affected them both (Yahya, 2015).Saudi Arabia and the Gulf states seek to ensure regional military balance, security, and internal stability (Cordesman, 2019). This was at a time when internal and external factors in Sudan and Iran stimulated relations between the two countries, resulting in a civilizational, cultural, political, and economic expansion between them that linked them together within the framework of African-Asian relations (Cordesman, 2019).

Because there are no borders between Israel and Sudan, it has made Sudan part of its broad strategy because it believes that the presence of a unified Sudan will support the Palestinian and Arab issues and help support the balance of power in favor of the Arabs. This policy is superior to the “divide and rule” policy used by British colonialism in its dealings with minorities and separatist movements in Sudan. The African continent and the Middle East region have gone through experienced secessionist movements carried out by local nationalities in the past decades, mostly supported by external interests and concerns to achieve their political or economic imperialist goals. In this context, the forces of the left and right struggled to decide to resolve the national issue in South Sudan. It achieved some success during the first two years of Jaafar al-Numeiri’s rule (1969-1985) when the government leaned towards programs dependent on Western aid and investment, which was accompanied by violent

repression of the Sudanese military and organized unions and of the Sudanese Communist Party in 1971 AD. This repression reflects the conflict between Numeiri's government and the Sudanese popular forces over which social classes should lead the struggle for social change. This led to the strong alliance between Sadat's Egypt and the rich oil-producing Arab countries as partners in Sudan's economic development. These countries see Sudan as a showcase for agribusiness in the Middle East. Whatever the promise of such development trends, they represent the most important economic and political changes in Sudan since the entry of British colonialism at the end of the nineteenth century (Collins, 1976).

Israel's role in making South Sudan become a state became clear, in addition to its support for the rebellion in Darfur (Muttlak, et al., 2019). Developments and events revealed its involvement in supporting the rebel movements in Darfur by training the rebels and supplying them with weapons. Israel even made the issue of intervention in Sudan a priority. Its foreign policy is to preoccupy Sudan with its internal problems and then keep it from playing a pivotal role in regional issues. In addition to its ambitions in the Darfur region, whose area is equivalent to 20% of the area of Sudan, and is linked by international roads to Egypt and Libya, it contains about 69 million tons of high-purity uranium ore, which is the third or fourth-largest uranium stockpile in the world (Al-Sahli, 2018).The plan to separate the Darfur region from Sudan is intended as the second step in the partition plot. Abdul Wahid Muhammad Nour had previously announced from his movement's headquarters in Tel Aviv that, in the event of the establishment of the Darfur state, he would grant Israel an exclusive privilege to explore and extract uranium, gold, and oil in the nascent state, as he would be its prospective president. It is expected that the Kordofan region will be a victim of partition at a later stage, followed by the stripping of Sudan of the eastern part of the country. In the event of the separation of Darfur, the

area of Sudan will decline again from 1.8 million square kilometers to 1.3 million square kilometers. If the Kordofan region is separated, the area of Sudan will decline to 900 thousand square kilometers. If the East separates, the area of Sudan will become 500 thousand square kilometers, turning into five mini-states based on religious, ethnic, and tribal foundations.

In confirmation of what was mentioned above, Israeli intelligence reports and studies revealed the Zionist entity's focus on Sudan since its independence, and its failure to achieve the stability and economic development that would make it an Arab and African regional power. It created the circular alliance represented by Uganda, Ethiopia, Eritrea, and Zaire, in addition to weakening Sudan by creating crises, separating the south, and paving the way for the secession of Darfur. Their allies in the south are able to implement Israel's agenda in Sudan and a large and important amount of the Israeli goals in Sudan have been achieved, at least in South Sudan. Especially since Sudan represents a strategic depth for Egypt (Dirar, 2020).The fear of dividing Sudan and declaring the state of the South is not a fear for the North alone, but it is a double fear for a South that may not find protection and a North that may not find stability. If we add to that the Darfur crisis, its uncertain future, and what awaits Kordofan, we realize that the winds of division will not stop in South Sudan. What is happening in South Sudan is similar to what happened in the 1920s at the hands of England and France as they jointly divided what remained of the Ottoman Empire (Juwaida, 2011).

Sudan comes at the top of the list of countries targeted by the "New Middle East" strategy, and the creative chaos based on dividing countries into warring mini-states on religious and ethnic lines. There is an Israeli plan to establish a Kushite state in Sudan according to specific timetables and carefully prepared steps. The state of South Sudan is considered the first stage

to act as a lever for the demolition of the old state. As for the second phase of the Israeli plan, which began its implementation, the establishment of the so-called independent and sovereign Republic of Central Sudan extends from Umm Dafuq in South Darfur in the west to Kurmuk in the east, passing through the Kauda region. This plan aims to flood the Second Sudanese Republic with a number of sectarian conflicts and wars, deepen the concept of apostasy to tribal and ethnic loyalties instead of the state, and spread a culture of marginalization to encourage the parties to enter into wars with the center to extract their rights by force and establish independent mini-states. The goal of establishing the Republic of South Sudan is a first step to establishing the state of Kush, which will bring together the independent states of ancient Sudan. Work will be done to repeat the same scenario that led to the separation of the south, which is war, then peace, then self-determination, then separation and formation of independent mini-states, then uniting in a subsequent step to establish the state of Kush (Al-Ardi, 2012). As for northern Sudan, it will be occupied by the second separation, which is the separation of Darfur. Sudan will be divided into three countries: the south, the Islamic state of the north, and the state of Darfur, which will be added to the League of Arab States (Figure 2). This fragmentation plan is considered public and not secret, and it is the new (Sykes-Picot), with the exception of Israel, the only beneficiary of the division of the Arab countries, as it was at the beginning of the Kingdom of Egypt and Sudan, then the states of Egypt and Sudan, and now the establishment of three mini-states in Sudan (Al-Raddadi, 2010).

Figure 2: Partition of
Sudan into five states according to the Israeli-American Plan

3. The United States of America's plan to divide Sudan

The United States is considered the main force behind the South Sudan separatist movement and its goals are to tear Sudan apart by applying a divide-and-rule strategy to delay the renaissance of Africa, at the same time it works to pave the way for American companies to encroach on Sudanese petroleum resources (Main, 2011). The American role in settling the conflict in South Sudan has begun since 1972,

Washington, with the support of the World Council of Churches, succeeded in reaching the Addis Ababa Agreement. The same scenario was repeated through American sponsorship of the Comprehensive Peace Agreement in 2005, where the SPLM worked to exploit religious and ethnic factors in its war against the North (Al-Bawaba, 2011).

There are hidden dimensions to the issue of South Sudan, including the general confrontation between the center and the periphery in a state characterized by total inequality in power and resources, and the intense conflict over diminishing resources among ethnic groups in different parts of Sudan (Kok, 1996). In confirmation of this, it became clear that the famine that occurred among the Dinka in the period 1985-88 was rooted in the exploitation of northern Sudanese traders due to the policies of the central government, in addition to international interests, as international donors found a "space for action" that enabled them to use policies that were effective to a long extent (Keen, 1991). This may be within the status of social care for Negroes and one of the forms of philanthropic colonialism that had two faces, one of which was the face of paternalism based on the assumption of their cultural and clinical backwardness, based on the assumption that they are exposed to psychological destruction related to their history as Negroes (Miller, 1969). Here, non-governmental organizations, even in the absence of democracy and under a harsh authoritarian government, can intervene positively and contribute to socio-economic change, especially those affecting the marginalized poor, by highlighting issues that concern them and working to promote alternatives to political Islam.

Dividing the Arab world into mini-states is still a dream on the American administration's agenda (Juwayda, 2011). The United States sees the need to re-divide the Middle East, including Sudan, into small, weak states, where the Arab Spring revolutions began, as former US intelligence chief James Woolsey said in 2006, "We will create for them an Islam that suits us, then we will make them carry out revolutions, and they will be divided among each other into fanatic strife, and then we will come marching." We will be victorious (Al-Makki, 2014). In a message

broadcast by the Israeli intelligence website "Debka"quoting African intelligence sources, the American and Israeli intelligence services are currently working to dismantle the authority in Khartoum through internal agents and rebel movements, after which five con-federal states will be established, including the Islamic State of Sudan, the State of Darfur, a state in the south, the State of the Nuba Mountains, and the State of the Blue Nile (Figure 2). They established two main centers to launch their plans, the first operating in Chad and the second based in Djibouti (Al-Sayed, 2013).

The emergence of the conflict in Darfur may indicate that the civil war in Sudan was not, in its entirety, a conflict between North and South or between Muslims and Christians, but rather it was a conflict at the country level that included even Muslim groups. The two main anti-government groups are the Justice and Equity Movement and the Sudanese Liberation Movement/Army. It is said that the Janjaweed are of Chadian origins that finance themselves through plunder and pillage and receive veiled support from the government in Khartoum (Mans, 2004).

The United States of America seeks to establish an independent state in central and northern Sudan that will be under American administration and with Egyptian approval, as an Egyptian-American understanding occurred regarding the future of the region. The American plan aims to divide Sudan into five countries (Al-Muslim website, 1426 AH). The US Congress unanimously approved in a secret session in 1983 the Dr. Bernard Lewis project, and thus the project became a top American policy so they made long-term plans for it (Al-Tanaib, 2019). The project aims to divide the Arab world in favor of the Zionist state where "These peoples must be tightened, besieged, and ethnic contradictions, tribal and sectarian fanaticism must be exploited in them before they invade America and Europe to destroy civilization there" (Abdel Fatah, 2018).

Bernard Lewis's document to fragment the Arab and Islamic world believes that it is necessary to re-divide the Arab and Islamic countries

into tribal and sectarian units (Ben Jeddou, 2020). Regarding Sudan, Bernard Lewis says, “Sudan is the most disintegrated country in the Arab and Islamic world, as it consists of four population groups, each of which is alien to the other. Therefore, it can be divided into four states as well: the Nubia state, which is integrated with the Nubia state in Egyptian territory, the Islamic northern state, with its capital, Khartoum, and the Christian South state, whose capital will be Juba, and the Darfur state, whose capital will be El Fasher” (Haider, 2019) (Figure 3).

The United States seeks to benefit from the intensity of the conflict in Darfur, in which several factors have combined in recent years, including local factors, including drought, desertification, and high population growth. The emerging crisis between the central authority and the worsening political crisis in the Darfur region in light of the deterioration of local governance there also helped. American policy benefits from these conditions and strives to grant independence to the Darfur region (Al-Muslim website, 1426 AH). As it is rich in uranium, gold, and petroleum (Abdel Baqi, 2018).International oil companies are waiting for Darfur to secede from Sudan so that they can achieve the greatest possible gains. Therefore, the theory of creative chaos has been operating in Darfur since 2003, alongside an international game whose chapters have not yet been completed around the oil triangle located in the common area between western Sudan - Darfur in particular -Chad and Libya, which is essentially a French-American-Chinese conf lict .

Figure 3: Bernard Lewis' map to divide Sudan

The American strategy regarding Sudan will continue without change because the Americans believe that it is the weakest link, achieving an African breakthrough in Darfur may be recorded as a bright spot that serves American strategic interests aimed at reducing historical French influence, especially after oil discoveries and the imminent de-

pletion of natural resources facing all over the world (Al-Hajj, 2012). Political-economic globalization benefits from the sanctions or blockade imposed by the United Nations on countries as a weapon with increasing military use in the politics of the international community, assuming that they are effective means of forcing "rogue" transgressor countries to return to the international line. Although these sanctions forced these countries, including Sudan, to remain within the international legal framework, they worked to strengthen them internally, which increased social divisions and armed action of a religious nature. Contrary to what was intended, the sanctions have destroyed long-term aspirations for political stability and good governance in the Middle East and have not created a secure global order. Sudan's fate is considered inevitable, vital, and critical to political stability in the Northeast African and Red Sea region.

Looking for why?

The conditions of political instability in Sudan created appropriate opportunities for global imperialism and its new approach known as political-economic globalization to develop plans for its division. The circumstances of Sudan's political instability are due to its failure to achieve political governance that satisfies its disparate ethnic and political components, in addition to the lack of a clear foreign policy for most of the period of independence, but rather irregular interests in the affairs of the outside world, in addition to its developmental and ethnic problems that have been rooted since its formation as a state during the period of British rule. Under the policies of global imperialism and its arm known as globalization, Sudan has become under the hammer of division into mini-states that exploit its natural and human resources in accordance with the policies of colonial governments. The new generation of these colonial governments was built through contemporary investment agreements (Mann, 2003), which were opposed by the New Bandung framework agreement based on a stable North-South regime. Reigning orthodoxies have seized land and agricultural investments in Africa via Asian states. This bears the characteristic of

core-centric models such as accumulation by scarcity or dispossession, which failed to stop the collapse of accumulation strategies in the northern countries because of their connection to the new forces, policies, and movements in the southern countries. Asian investments represent an attempt to meet the rising food demands of the new elite in emerging economies, and class cooperation between them and the African elite, rather than a crisis of accumulation (Martin, et al., 2014).

The countries of the North, within the system of modern imperialism, have increasingly participated in the process of horizontal domination and sovereignty in their quest for access to natural resources by virtue of the growth of the global economy which has become more integrated. They have projected their combined power onto the countries of the Global South to assert vertical control in the ongoing sharing and withdrawal of resources. This domination and control gave rise to a cruciform global structure, where the resulting uneven development was associated with poverty, competition for resources, and conflict (Carmody, 2009).

These imperialist policies were followed by widespread aggression and seizure of lands around the world by international institutions, especially on the African continent, since the emergence of the global financial crisis in 2008 AD, and the associated food crisis. Between 2010-2011, an estimated 227 million hectares in the Third World, equivalent to the area of northern and western Europe, were sold, licensed, or leased to foreign institutions. In 2009 alone, 50 million hectares of farmers were transferred to these institutions. Some of this land was purchased, while the vast majority was leased over a long period of time, ranging from 25 to 99 years, which usually had to be renewed (Broughton, 2012). These activities cause the problem of climate change in the rich industrial countries of Europe and America, which are able to adapt to climate change while poor countries are unable to do so. (Bachram, 2004) The practices of large multinational companies and institutions that have interests in cocoa production and are supported by organizations that provide It itself works to achieve

fair trade, as a means of reproducing and continuing the slavery of workers around the world. This exploitation is clearly concentrated among the people of the country of Ivory Coast, which produces 40% of global cocoa production (Athreya, 2011).

For many decades, Sudan has been coveted by many foreign powers that want to control and dominate its capabilities, or at least obtain them at the lowest prices, as they are eager to benefit from the country's natural resources and strategic location. The UAE is considered the largest export destination in Sudan, followed by China. Sudan has agreed to lease millions of acres to Saudi Arabia, Bahrain, Turkey, and China, and the coastline on the Red Sea is an important sea route (Arabi Post, 2020). In its relentless pursuit of energy sources, China has established relationships with pariah states that the United States seeks to marginalize, which has led to creating tensions with the new Chinese policy (Canning, 2007).Chinese national petroleum companies have become new players in the global petroleum industry in the past two decades. Since it lacks sufficient experience in competing with other international companies in managing huge oil fields, with little experience in political risks and security, it has gained from its experience in Sudan a competitive role in global strategy and in developing its capabilities (Patey, 2017).

George Bush conducted a dialogue with Khartoum, followed by a constructive policy between the two parties, in contrast to Clinton's policy aimed at isolating Sudan. This is due to the influence of the American Church, the importance of combating terrorism, and economic interests, especially the pressure group or the oil lobby (Huliaras, 2006). The efforts made by American activists to pressure Asian companies in Sudan are similar to those efforts to find light in the darkness or swim against the current. While the campaign of plunder and dispossession against Sudan is increasing in the United States, its impact on achieving real results in Sudan remains questionable. These activists failed to integrate Sudan's broad economic and political relations into their various strategies, but they did, arguably, look for ways to put

pressure on state-owned enterprises by divestment of the financial market (Patey, 2009).

One of the factors that helped provide a basis for globalization to operate is the developments that occurred in Sudan during the last three decades, which led to a gradual and regular change in the nature of the conflict from the traditional form of an ethnic-religious nature to one over resources. The role of resources increased with the worsening of the economic crisis, as they emerged as an influential force in the civil war in Sudan (Suliman, 1977). This is considered part of the framework of the dialogue on the relationship of oil to development in Africa, as some believe that oil wealth fuels corruption in the state and creates social crises, violent civil conflict, extravagance, and waste. Sudan found increased global interest when it became an exporter of oil, and more attention focused on oil as a source of wealth and power and as a subject of potential conflict. In reality, oil alone will not lead to violence and corruption, as conflict only occurs as a result of the "politicization" of the oil factor in ways that make control over it and its distribution confined to the hands of a few who work to make it exclusive to others (Obi, 2007).

Local conflicts overlap with national and regional conflicts, as issues related to land, play a role in creating poverty and driving and sustaining ongoing conflicts driven by an agenda that works from the top down and the bottom up (Sorbo, 2010). In the issue of South Sudan, there are concealed dimensions that include the general confrontation between the center and the margins in a state characterized by total inequality in power and resources, and the intense conflict over diminishing resources among ethnic groups in different parts of Sudan (Kok, 1996).It became clear that the famine that occurred among the Dinka in the period 1985-88 was rooted in the exploitation of northern Sudanese traders due to the policies of the central government as well as international interests, as international donors found "room to operate" that enabled them to use policies that were effective to a long extent (Keen, 1991).

Sudan has emerged as a cornerstone of developing economies, linking the oil-rich Arab countries to the rest of sub-Saharan Africa, making it vulnerable to modern imperialist ambitions. It has received significant grants and loans from Arab countries to increase its agricultural productivity so that it becomes a food basket for the Arab world and to achieve regional food security so that it can avoid any economic boycott imposed on it by the Western world in the future. Until recently, Sudan was not an expected element linking the desires and interests of Arabs and sub-Saharan Africa. The African continent and the Middle East region have gone through experience of separatist movements carried out by local nationalities in the past decades, often supported by external interests and concerns to achieve their political or economic imperialist goals.In this context, the forces of the left and right struggled to decide the national issue in South Sudan.

Seven years after the government of Jaafar al-Nimeiry, which achieved some success during the first two years, the government drifted towards programs dependent on Western aid and investment, which was accompanied by violent suppression of the Sudanese military and organized unions and the Sudanese Communist Party in 1971 AD. This repression reflects the conflict between Numeiri's government and the Sudanese popular forces over which social classes should lead the struggle for social change. This led to the strong alliance between Sadat's Egypt and the rich oil-producing Arab countries as partners in Sudan's economic development. These countries see Sudan as a showcase for agri-business in the Middle East. Whatever the promise of such development trends, they represent the most important economic and political changes in Sudan since the entry of British colonialism at the end of the nineteenth century (Collins, 1976).

Sudanese politics has become complex since the 1964 revolution as a result of many intertwined and often contradictory factors. Although Sudan is located along a belt of partly Christian and partly Muslim countries, however, it did not find acceptance or love from the Christian governments in power in those neighboring countries at a

time when Sudan had the ability to be a confrontation state between the revolutionary Arabs and the governments that had an orientation towards the Eastern camp and the governments that had an orientation towards the West. The government of General Abboud from 1958-1964 officially stood for world peace, African unity, Arab unity, non-neutrality, and the struggle of peoples for freedom. But through practice, it became clear that the military government was indifferent to foreign policy at a time when most African countries had determined their position towards the Western or Eastern blocs and Sudan remained far from them. President Abboud's meeting with US President Kennedy in 1961 encouraged good relations between the two countries, but Shawan-Lai's visit to Sudan in January 1974 did not mean much in foreign policy frameworks. It is natural for the military to seek recognition and assistance from powerful countries in order to strengthen their positions. African problems remained present in both national and regional considerations despite the end of the Cold War and the disappearance of external strategic and ideological considerations. Sudanese-American relations developed after the year 2000, although they were characterized by hostility and ferocity before that, especially after the events of September 11. In fact, it is impossible to understand the necessity of continued bilateral cooperation and mutual dependence in achieving internal peace in Sudan and ending the war on terrorism.

References:

- Abdel Fattah A. December 21, 2018. Bernard Lewis's plan to divide Sudan and Egypt. Al-Rakouba electronic newspaper. (Arabic)

- Africa News Portal. October 26, 2015. Books - Loud surprises about the role of Israeli intelligence in dividing Sudan. africangate-news.net (Arabic)

- Al-Ardi, F. Al-Sharq newspaper. January 2, 2012. A political source for Al-Sharq newspaper: A plan to break up Sudan and establish a "Kush" state. https://m.alsharq.net.sa (Arabic)

- Alawiya Dictionary of Shamar. May 21, 2013. Facebook? (Arabic)
- Al-Bawaba زJanuary 2011. America sponsors the division of Sudan and Israel expands its influence. www.albawaba.com (Arabic)
- Albdel-Alatif, A. B. 1996. The religious dimension of the South Sudan issue. Center for Strategic Studies, Khartoum, p. 31. (Arabic)
- Ali, B. 2010. Repression of Sudanese civil society under the National Islamic Front/National Congress Party. Review of African political economy 37 (126): 437-450.
- Al-Makki. A.H.O. 2014. Within three years, the map of Sudan will change. Akher Lazha newspaper. Al-Nilin website. (Arabic)
- Al-Raddadi, Ayed. 2010. What happens after dividing Sudan into three states? Madina.com
- Al-Sahli, Nabil. 9/19/208. Presentation of the book: Sudan and the Future of Geopolitical Conflict, by Abu Iskandar Al-Sudani - Publisher, Al-Ghad Al-Arabi Center for Studies - Damascus - First Edition 2008. Al-Jazeera www.aljazeera.net
- Al-Tanaib, Jassim. 9/26/2019. Bernard Lewis. The Godfather of Partition 2-2. Al-Anbaa www.alanba.com.kw (Arabic)
- Athreya, B. 2011. White Man's "Burden" and the new colonialism in West African cocoa production. Race/Ethnicity Multidisciplinary Global Contexts 5 (1):51-59.
- Babiker, Saif Al-Din. 10/03/2018. Sudan today has been in a conflict between the Egyptian Arab movement and the Afro-Fulani movement since 1956. Who will win? Sudanese-Online. https://sudaneseonline.com (Arabic)
- Bachram, H. 2004. Climate fraud and carbon colonization: the new trade-in greenhouse gases. Capitalism Nature Socialism 15 (4):5-20.

- Ben Jeddou, N. 4/27/2020. In the footsteps of the division of Sudan...announcing a “state” in southern Yemen. Al-Shorouk website. www.shourouk.com (Arabic)

- Broughton, A. 2012. Land grabbing: A new colonialism. International journal of socialist renewal. Links.org.au

- Canning, C. 2007. Pursuit of the pariah: Iran, Sudan, and Myanmar in China’s energy security strategy. Security Challenges 3 (1):47-63.

- Carmody, P. 2009. Cruciform sovereignty, matrix governance and the scramble for Africa’s oil: Insights from Chad and Sudan. Political Geography 28 (6): 353-361.

- Cohen, B.J. 2018. The geography of money, Cornell University Press.

- Collins, C. 1976. Colonialism and Class Struggle in Sudan. MERIP Reports 46: 3-17+20.

- Cordesman, A.H. 2019. The Gulf and search for strategic stability: Saudi Arabia, the military balance in the Gulf, and trends in the Arab- Israeli military balance. Routledge

- Dirar, Abdul Rahim. February 21, 2020. Sudan and the grand conspiracy: normalization with Israel and division into mini-states... when and how? Al Sharq al-sharq.com (Arabic)

- El Shair, I.M. 2015. Ethnic groups and the emergence of South Sudan: A study in socio-political geography. J. of social affairs 52 (2454):1-26.

- Gidron, Y. 1971. “One People, One Struggle”: Anya-Nya propaganda and the Israeli Mossad in Southern Sudan, 1969-1971. Journal of Eastern African Studies 12 (3):428-453.

- Haider, Alaa. April 14, 2019. The Muslim Brotherhood and the division of Sudan Country. Ballad news. (Arabic)

- Hajj, our exile. April 29, 2012. The Plot to Divide Sudan, written by Al-Fatih Kamel, Arab House of Sciences, Publishers. Al Bayan newspaper www.albayan.ae (Arabic)

- Hamdan, Ezz El-Din. Sudan is part of the largest American division project for the Arab and Islamic world: the Bernard Lewis Project (1). Al Rakouba newspaper. (Arabic)

- Harris, C.1991. Power, modernity, and historical geography. Annals of the Association of American Geographers 81 (4): 671-683.

- Hassan, Y. F. 1967. The Sudanese revolution of October 1964. The journal of modern African studies 5 (4):491-509.

- Howell, J., Hamid, B.M.1969. Sudan and the Outside World, 1964-1968. African Affairs 68 (273): 299-315.

- Huliaras, A. 2006. Evangelists, oil companies, and terrorists: The Bush administration's policy towards Sudan. Orbis 50 (4):709-724.

- Juwaida, F. January 7, 2011. Arab silence and the conspiracy to divide Sudan. Islam Today website, quoted from the Egyptian Al-Shorouk newspaper, www.islamstory.com (Arabic)

- Karadawi, A.1991. The smuggling of the Ethiopian Flasha to Israel through Sudan. African Affairs 90 (358):23-49.

- Keen, D.1991. A disaster for whom? Local interests and international donors during famine among the Dika of Sudan. Disasters 15 (2): 150-165.

- Kok, P.1996. Sudan: Between radical restructuring and deconstruction of State systems. Review of African political economy 23 (70):555-562.

- Luke, A P. 2009. Against the Asian tide: the Sudan divestment campaign. The journal of modern African studies 47 (4): 551-573.

- Luke, P. 2017. Learning in Africa: China's overseas oil investments in Sudan and South Sudan. Journal of Contemporary China 26 (107): 756-768.

- Machar, R.T.D.1995. “South Sudan: A History of Political Domination - A Case of Self-Determination”. Ben.Parker@dha.sasa.unep.no (Ben Parker)Subject: document Message-Id: c51_9511191041@sasa.unep.no

- Mahmoud, F.B. 1983. The Sudanese Bourgeoisie: vanguard of development. Zed Press, London.

- Main, Y. 2011. Oil factors behind Southern Sudan referendum and implications to Chinese oil investment in Sudan. Sino-Global Energy 5.cnki.net

- Mann, H. 2003. International investment agreements: Building the new colonialism. Proceedings of the ASIL annual meeting 97:247-250.

- Mans, U. 2004. Briefing: Sudan: the new war in Darfur. Africa Affairs 103 (411): 291-294.

- Martin, W.G., Palat, R. A. 2014. Asian land acquisition in Africa: Beyond the “new building” or” new colonialism”? Agrarian South: Journal of political economy 3 (1):125-150.

- Miller, H.1969. Social work in the black ghetto: The new colonialism. Social work 14 (3):65-76.

- Fathia Musa. 2013. Dividing Sudan into “five” states... Restructuring the state through agents. Al-Intibaha Journalism 05/25/2013. (Arabic)

- Muslim website. 2 Rabi’ al-Thani 1426 AH. Dividing Sudan between the malice of the outside and the negligence of the inside. Muslim website almoslim.net (Arabic)

- Muttlak, H.K., Mohi Aldeen, R.D. 2019. The geographic importance of Sudan in the Israeli strategic perception. Tikrit Journal of Political Sciences, 528-557.

- Nmoma, V. 2006. The shift in United States-Sudan relations: A troubled relationship and the need for mutual cooperation. Journal of Conflict Studies 26 (2). https://journals.lib.unb.ca

- Obi, C. 2007. Oil and development in Africa: Some lessons from the oil factor in Nigeria for the Sudan. Oil development in Africa: Lessons for Sudan after the comprehensive peace agreement, Copenhagen: Danish Institute for International Studies Report 8.

- Oded, A. 2006. Israeli-Ugandan relations in the time of Id Amin. Jewish political studies review 18(3/4): 65-79.

- Rose-Rewood, R. S. 2006. Governmentality, geography, and the geo-coded world. Progress in Human Geography 30 (4):469-486.

- Sassen, S. 2000. The state and the new geography of power. The ends of globalization: Bringing society back in, 49-65

- Sorbo, G.M. 2010. Local violence and international intervention in Sudan. Review of African Political Economy 37 (124):173-186.

- Spaulding, J. 2000. The chronology of Sudanese Arabic genealogical tradition. History of Africa 27:325-337.

- Suliman, M. 1977. Civil war in Sudan: The impact of ecological degradation. Contributions in Black Studies 15 (1),7. https://scholarworks.umass.edu.

- Turner, M.E.1990. Achebe, Hegel, and the new colonialism. Kunapipi 12 (2), 6. Ro.uow.au

- Wai, D.M.1979. The Sudan: domestic politics and foreign relations under Nimiery. African Affairs 78 (312):297-317.

- Woodward, P. 1979. Condominium and Sudanese nationalism. Collins, London. Africabib.org

- Yahya, Ahmed Muhammad. 2009. The development of Sudanese-Iranian relations between the period 1974-2009. Google.com (Arabic)

- Yahya, O. 2015. The international conflict over the Horn of Africa and its impact on the security of the Arabian Gulf. African journal of political sciences 4 (1)

- Young, A. 2018. Transforming Sudan. CambridgeUniversity Press.

14

Peace Efforts in Sudan and a Proposed Geographical Strategy to Remain a Unified State

14

Peace Efforts in Sudan and a Proposed Geographical Strategy to Remain a Unified State

Sudan suffers from many central problems that threaten its survival as a single cohesive state. The geographical composition of Sudan has been linked to colonial thought and history and to the differences in political thought of the national regimes that succeeded it. The historical policies of British colonialism affected Sudan's geographical, political, and social future after its departure. Since Sudan is distinguished by its strategic geographical location and the diversity of its natural resources, it gave it regional and global importance and made it coveted by colonial powers. These natural resources also worked, along with regional development policies, in determining the spatial signature of patterns of economic and social development that were characterized by regional imbalance. All of this helped in the emergence of tribal conflicts, regional rebellions, and political-social conflict therein. The rebel movements have created challenges to the legitimacy of the independent Sudanese state, in addition to elaborate external plans to weaken it, so that Sudan is heading towards increasing fragmentation and division despite all efforts. From local, regional, and global efforts, agreements were signed to achieve peace since it gained its independence in 1956 AD.

This research proposes a geographical strategy composed of a vision, a mission, five strategic objectives, thirteen strategies, and forty-one projects to help keep Sudan a cohesive State.

1. Efforts to achieve peace in Sudan

For decades, Sudan has witnessed negotiations between the central government and rebel parties in some regions, some of which ended

with success and others with failure. The Round Table Conference was held in March 1965 to discuss constitutional relations between the North and the South. The southerners disagreed and divided into three groups: a group demanding unity, a group calling for secession, and a group demanding self-rule within the framework of a federal Sudan. The Addis Ababa Agreement in March 1972 focused on respecting religions, recognizing the cultural characteristics of the people of South Sudan, and recognizing the right of the South to self-government without the domination of the center. In the Kokadam Agreement in March 1986, between the leaders of the National Rally and the Sudan People's Liberation Movement, a ceasefire was requested, the laws of September 1983 were abolished, and the military agreements with Egypt and Libya were canceled, provided that a constitutional conference would be held in June 1986 that would include the problem of nationalities, basic human rights, and a political system, governance, debt problems, unbalanced development, cultural problems, education, and foreign policy (Khaled, 2000).

The Sudanese peace agreement between Al-Mirghani and John Garang in November 1988 stipulated the principles of unity, upholding the bond of citizenship, freezing laws attributed to Islam, and canceling military agreements with the countries with which Sudan was a signatory (Khalid, 2000). The Palace Agreement in April 1989, sponsored by Prime Minister Sadiq al-Mahdi, and all Sudanese parties, with the exception of the National Islamic Front, resulted in the renunciation of war, the confirmation of previous peace agreements with the SPLM, the abolition of the laws of September 1983, and the establishment of the Constitutional Conference. The Sudanese government agreed in Abuja 1 in May 1992 with the southern factions (Garang and the Nasser group) to distribute public income, rebuild areas destroyed by the war, and address the problems of migrants and refugees. The Abuja 2 conference was held in April 1993 between the Sudanese government and a number of officials from the southern and western states, and it was agreed to commit to the unity of Sudan, to form a committee to distribute national income, and to continue dialogue on the issues of religion and state.

The IGAD Initiative in May 1994 stressed the unity of Sudan, the recognition of democratic pluralism, the decentralization of governance, and the equitable distribution of wealth. The National Salvation Government did not sign this initiative, as it reserved reservations about the separation of religion from the state, but it signed it again in July 1997. It laid the foundations for resolving the conflict in Sudan, which included a peaceful solution, the right to self-determination for the citizens of South Sudan through a referendum, and the priority of preserving the unity of Sudan, and realizing and absorbing All types of racial, ethnic, religious and cultural diversity in Sudan, ensuring full social and political equality among all Sudanese citizens, establishing a secular democratic state, achieving an appropriate division of wealth, human rights, independence of the judiciary, and the right to self-determination, including independence by referendum in the event that agreeing on some of the provisions contained in the agreement (Khaled, 2000) and on the historical structure of colonialism to achieve this (Fattah, 2018; Al-Bawaba, 2011; Al-Bouni, 1996; Al-Tanaib, 2019; El Shair, 2015).

IGAD adopted a two-dimensional approach, which is to support the military situation of the Sudan People's Liberation Movement/Army and the northern opposition movements to put pressure on the Islamic Front government, which will not be able to win the war and to develop a framework that follows a policy to reduce the conflict and build a more harmonious system with the region. Efforts to unify the opposition succeeded in forming the National Democratic Alliance in June 1994, and it remains difficult to predict Sudan's future. The entry of the new regional leadership means that the power equation in Sudan will not continue for long, with the Arab/Muslim north prevailing (Deng, 1998). After the agreement between John Garang and the northern government, Mansour Khaled identified new points in the conflict, which are the recognition of the cultural and religious diversity of the country, the separation of religion and state, the recognition of citizenship as a main determinant of political rights and duties, and the radical reconstruction of the state as a quasi con-federal state, as he believes that

these things represent Sudan's last chance to remain united (Khalid, 2003).

The National Rally held a conference on fateful issues in accordance with the decisions of Asmara in June 1995, which included all Sudanese forces from the north and south, with the exception of the ruling National Islamic Front. The National Rally discussed the issues of marginalized regions and the possibility of discussing a political-economic agenda that would reduce Khartoum's administrative hegemony over these regions and end the problem of distributing national wealth between them and the Nile North. He also raised the relationship between religion, state, and politics. The National Rally signed decisions including the right to self-determination for South Sudan, the restructuring of governance, and the distribution of powers between the center and the regions. The Egyptian-Libyan initiative - the Tripoli Declaration in July 1999, was at the invitation of the Sudanese National Democratic Rally, which was adopted by Egypt and Libya and became the basis for the joint initiative to resolve Sudanese conflicts and conclude a comprehensive political agreement.

The Sudanese government and the Sudan People's Liberation Army Movement agreed in Machakos in November 2002 to abolish the application of Islamic law in areas inhabited by non-Muslims and to hold a referendum in the south on secession or unity after a six-year transitional period. As for the Nakura memorandum in July 2003, which was presented by IGAD mediators and rejected by the Sudanese government while the SPLM accepted it, it included determining the fate of the Abyei region and the Nuba Mountains, which would have its own state legislative body authorized (exclusively) and to enact laws on all the issues mentioned in the tables prepared in the final draft of the protocol, the southern Blue Nile region will be subject to various arrangements in addition to including topics related to oil. The 2003 Naivasha Agreement between the government and John Garang stipulated a ceasefire and many security and other arrangements.

In addition to all these efforts, other efforts were made to achieve peace in Sudan, including the Nuba Conference Resolution - Towards a Bright Future for the Nuba Mountains - Kauda, December 2002, and the Ndjamena Agreement for a humanitarian ceasefire regarding the conflict in Darfur between the government, the Sudan Liberation Army/ Movement, and the Justice and Equality Movement on April 8. 2004, and another on April 25, 2004, a protocol between the Government of Sudan and the Sudan People's Liberation Movement on resolving the conflict in the Kordofan Mountains/Nuba and Blue Nile states, a protocol between the government and the Sudan People's Liberation Army/Movement on the conflict in Abyei - May 26, 2004, and a protocol for improving the situation in Darfur between the government, the Sudan Liberation Army/Movement and the Justice and Equality Movement; Abuja - on November 9, 2004, and a draft framework protocol for resolving the conflict in Darfur between the Sudan Liberation Army/ Movement and the Justice and Equality Movement in April 2005, and a declaration of principles for resolving the Sudanese conflict in Darfur between the government The Sudan Liberation Army/Movement and the Justice; and Equality Movement in Abuja, July 5, 2005, the Darfur Peace Agreement between the government and the Sudan Liberation Army/Movement - Abuja, May 5, 2006; the Declaration of Principles for Resolving the Conflict in Eastern Sudan between the Government and the Eastern Front, June 19, 2006, and the Eastern Sudan Peace Agreement between the Government and the Eastern Front, October 14, 2006 (https://www.c-r.org/our-work/accord/sudan). The Sudanese government and the Sudan People's Liberation Movement-North also signed a framework agreement in Juba that included a number of provisions, the most important of which were security arrangements and the governance system (Al-Sharq Al-Awsat Newspaper, 2020).

Solutions were proposed that focused on adopting federalism and confederation to maintain Sudan's geographical control. The Leadership Council of the Beja Conference believes that the optimal governance system for running the country is the decentralized system, where Sudan is divided into autonomous regions within the framework

of a single state, and the establishment of a pluralistic state that respects political, cultural, and religious diversity (Sputnik Arabic, 2017). Solutions were also proposed regarding the possibility of self-determination and the establishment of independent states in the event of the failure of the agreements signed between the government and the armed movements in some areas (peace agreements). The signing of the peace agreement between the transitional government and the armed movements in Juba in 2020 AD resulted in the emergence of other secessionist movements in the regions of northern and central Sudan, such as the Northern Entity and the Kush Movement, which did not exist before as a result of the unfairness of some of its provisions.

A peace building approach that enables the sources of conflict to be identified and offers multiple opportunities that are more integrated and comprehensive than what has been presented so far is important (Gunnar, 2010). This approach is "taking into account the fundamental changes that have occurred in a society that has been exposed to the risks of war and conflict, including rural-to-urban migration during periods of war, since Sudan gained independence in 1956 AD, it has not succeeded in maintaining a stable modern state" (Elnur, 2009). The idea of the United States of Sudan also emerged through a careful evaluation of the world's experiences in federal systems, taking into account the positives they demonstrated and avoiding the failures they highlighted. Conducting an objective evaluation of Sudan's experience in regional and federal governance and all that has befallen them over the years of their implementation, and ending the center-periphery conflict, is not excluded. Paving the way for the development of local cultures and languages, achieving balanced development locally in accordance with the local visions of the people of the states, opening areas of direct cooperation globally and regionally within an agreed-upon protocol, and encouraging reverse migration to the states to develop them and benefit from their resources and capabilities, and for Sudan to have a unified flag, currency, diplomatic representation, and others (El-Toam, 2020).

There are those who have pointed out that "Sudan's failure to build a unitary concept of self-definition formed the basis of the civil war that lasted for four decades. While geographical and demographic realities made the internationalization of the war inevitable in some respects, this occurred largely as a result of the schism between the Arabized North and The Muslim, South African and Christian are increasingly marginalized such that the cycle of violence can be summed up in the dynamics of recognition, confrontation, and alienation" (Deng et al. 1996). This may require "serious thinking about saving Sudan from the tampering of its people and placing it under international guardianship for a period of ten years, during which it will be under the direct umbrella of the Security Council, to secure the country from those who are fighting with it externally, and those who seek to tear it apart internally" (El-Toam 2017).

2. The proposed geographical strategy to keep Sudan a unified state

Sudan's central issues have created a geographical reality that prospects for its survival as a unified country has become uncertain. The proposed geographical strategy here, could help Sudan to overcome these central issues and achieve spatial integration, political-social stability, and economic development.

1. The general framework of the strategic plan to weaken/strengthen the negative/positive Sudan's central issues (Table 1)

Table 1: The general framework of the strategic plan to weaken/ strengthen the negative/positive Sudan's central issues

The general framework of the strategic plan to weaken/strengthen the negative/ positive Sudan's central issues		
What do we want to ?a c h i e v e	Vision	Vision: The ambitious future situation that Sudan aspires to is to weaken the negative geography factors to strengthen the positive geography factors
	Mission	Mission: The main goal that Sudan wants to achieve is to weaken the negative factors of geography
How do we achieve what ?we want	Strategic objectives (5)	Strategic objectives: goals, desired results, and long-term measures for Sudan to weaken negative geography factors
	(13) Strategies	Strategies: Direction and how to move towards achieving Sudan's strategic goals to weaken negative geographical factors
	(41) Projects	Projects: A specific system of objectives, detailed activities, procedures, and performance indicators to implement a specific strategy to weaken the negative factors of .geography

2. Pivotal strategic data and directions and their implications for the strategic plan to weaken/strengthen the negative/positive Sudan's central issues (Table 2)

Table 2: Pivotal strategic data and directions and their implications for the strategic plan to weaken/strengthen the negative/positive Sudan's central issues

Strategic data and directions	Its implications for the strategic plan
The trend is towards overcoming the negative aspects of Sudan's geographical formation process	Spreading the culture associated with clarifying the positive aspects of Sudan's large area and the multiplicity of its tribal and ethnic formations are factors of strength in building the .modern state

The trend towards eliminating disparities in economic and social .development	Formulating socio-economic development plans to reflect the state's plans to exploit its lands in a balanced manner between the various regions, taking into account geographical .differences
The trend towards weakening the fragility of the cultural, tribal, and .ethnic formation in Sudan	Increasing attention to awareness of the importance of true assimilation and peaceful coexistence and the repercussions of political conflict, civil wars, and forced migration on dif-.ferent societies
The trend is towards linking scientific research at the state level and educational institutions with the requirements for the development of spatial development and .linguistic and cultural overlap	Paying attention to applied research and studies by developing a short-term research plan at the level of every entity relevant to this matter, such as the Ministry of Agriculture, the Ministries of Education, General and Higher .Education, Information, and Social Welfare
The trend is towards creating systems of cooperation and development partnerships to exploit Sudan's various resources between the regions of Sudan and with internal and external capital-.ist entities	The state and regional governors communicate with internal and external parties from global economic institutions and voluntary, .civil, and community associations
Orientation towards developing the administrative system and im-.proving its performance	Implementing the federal system, evaluating global experiences related to it, and benefiting from Sudan's experiences in regional and local .governance

3. The themes and indicators of the strategic plan to weaken/strengthen the negative/positive Sudan's central issues (Table 3)

Table 3: Axes and indicators of the strategic plan to weaken/strengthen the negative/positive Sudan's central issues

Main topics	Main topics
The first main axis: is establishing a spatial database of Sudan's natural and human resources.	1Explaining the natural and spatial privileges of the various regions of Sudan. Clarifying the population numbers, their geographical distribution, and their professional and skill characteristics 2-. Providing realistic visions of how to benefit from spatial data in achieving balanced regional development 3-. 4-Working to end the center-periphery conflict through various national projects.
The second main axis: is supporting the federal system of government	Objective evaluation of Sudan's experience in regional and local governance 1-. .Involving civil administrations in local administrations 2- Involving qualified cadres from the people of the specified region in administrative work and in making administrative decisions within and across the region 3-. Formulating effective and effective legislation for local administrations and regional and central supervisory bodies 4-. Maintaining the geographical unity of Sudan as a general umbrella that brings together the peoples of the Sudanese nation 5-.

The third main axis: supporting balanced spatial development efforts	Developing national economic and social development plans 1- .that take into account ending the concept of center and margin Adopting national projects that encourage reverse migration 2- to the states to develop them and determining the percentages .of contribution to national projects between the states Determine state (regional) visions for balanced local devel- 3- .opment Working on freedom of development integration between and 4- .across states
The fourth main axis: is the tendency to benefit from the cultural composition .of Sudan	Legislation guaranteeing the privacy of ethnic and cultural dif- 1- .ferences .Spreading the culture of peaceful coexistence 2- Building the basis of individual differentiation based on the 3- values of the Islamic religion and sound human custom in gen- .eral education curricula 4-Weakening the concepts of preference through tribal and eth- .nic distinction 5-Pave the way for the development of local cultures and lan- .guages
The fifth main axis is strengthening the efforts made to keep Sudan geographically .unified	Benefiting from the positives of the peace agreements con- 1- .cluded in the various historical periods of Sudan Implementing some of the positive aspects of these agree- 2- .ments at the local community level Benefiting from the positive aspects of these agreements to 3- .solve current and emerging problems Taking lessons from the experiences of partition that occurred 4- .at the regional and global levels
The sixth main axis: is supporting balanced international relations	Supporting economic relations between Sudan and foreign 1- countries on the basis of mutual and common interests Taking advantage of Sudan's distinguished geographical lo- 2- .cation to support its regional and international position 3-Supporting global and regional economic cooperation within .agreed-upon protocols

4. Data collection and environmental analysis

Through my work in the field of geography for nearly four decades at the University of Khartoum and outside it, which included teaching various courses on the geography of Sudan, in addition to training field trips for students to different parts of Sudan, writing a number of books and published scientific research on the geography of Sudan, and listening to the opinions of many senior professors, and some political and community leaders, and review scientific journals related to Sudanese affairs and follow the course of political and other events through various media outlets with the available documented information and data, I can conduct an environmental analysis (SWOT ANALYSIS) of the strategic axes of weakening/strengthening the negative/positive of the proposed geographical strategy. By identifying the strengths, weaknesses, opportunities, and threats through analyzing the internal environment and the external environment of Sudan, according to each axis of the proposed strategy in order to meet its immediate needs and future aspirations. Below we will review the data for each axis individually in detail:

5. Strengths, weaknesses, opportunities, and threats in the main axes of the strategy to weaken/strengthen the negative/positive Sudan's central issues

5-1: The first main axis: Establishing a spatial database for Sudan's natural and human resources (Table 4)

Table 4: Spatial database of Sudan's natural and human resources

Strength point	Weakness points
1- The state's trend towards computerization of natural and human resources. 2- The presence of government agencies specialized in the field of databases, such as the Ministry of Communications. 3- The presence of departments specialized in databases in all ministries and government departments. 4- The existence of bodies specialized in Sudanese lands, such as the Land Authority, advisory bodies, investment departments, and asset departments. 5- The large number of local and international investment companies that possess data on Sudan's natural and human resources.	1- The ineffectiveness of traditional methods used in preserving and analyzing spatial data for Sudan's natural and human resources. 2- Inaccurate methods for actually evaluating the value of Sudan's various resources. 3- Not taking advantage of the digital technologies available in many entities related to various black resources. 4- Failure to link the types of spatial data related to Sudan's resources to actual and future needs. 5- The absence of a comprehensive geographical view of the locations of natural resources, as they are viewed separately from each other.
Opportunities	**Threats**
1- Availability of the Internet, geographic information systems programs, and spatial browsers such as Google Earth. 2- There is a lot of spatial data on Sudan's various resources available to government agencies (central and state), such as maps of minerals, water, soil, agricultural lands, population, and others. 3-The presence of an estimated number of qualified cadres working in the ministries related to Sudan's resources, such as geologists, engineers, and others. 4- The state's tendency to expand field exploration of natural resources, which enables increased opportunities for exploiting them.	1- Availability of the Internet, geographic information systems programs, and spatial browsers such as Google Earth. 2- There is a lot of spatial data on Sudan's various resources available to government agencies (central and state), such as maps of minerals, water, soil, agricultural lands, population, and others. 3-The presence of an estimated number of qualified cadres working in the ministries related to Sudan's resources, such as geologists, engineers, and others. 4- The state's tendency to expand field exploration of natural resources, which enables increased opportunities for exploiting them.

2-5: The second main axis: Supporting the federal system of government (Table 5)

Table 5: Support for the federal system of government

Strength points	Weakness points
1- The many experiences of regional and local governance and the many positives. 2- There are many contributions and visions from Sudanese thinkers. 3- Providing the political environment for adopting the federal government. 4- The large area of Sudan confirms the difficulty of central rule. 5- The success of the federal government experience in many African countries similar to Sudan. 6- Providing political awareness that the secession of South Sudan would not have been possible if federal rule had been implemented.	1- Lack of sufficient budgets to meet administrative requirements. 2- Lack of agreement on administrative borders between states for historical and geographical reasons. 3- Tribal interference and internal migration movement between states. 4- Weak relationship between senior administrations and local and civil administrations. 5- Internal regional conflicts as a result of the large number of ethnicities in some regions. 6-Foreign interventions, especially from regional poles.
Opportunities	**Threats**
1- The desire of many of the ongoing movements for Sudan to remain united and for there to be an opportunity to take over the rule of their regions. 2- Beginning to implement the signed peace agreements. 3- Awareness of the consequences of wars on local communities and the natural environment among local officials. 4- Increase awareness of the necessity of regional integration and its economic-social benefits.	1- The presence of separatist tendencies in some regions and the demand for the right to self-determination. 2-The historical legacy of slavery and slavery among some regional components. 3- The difficulty of implementing reverse migration for people from different regions who were born and lived in regions other than their home regions. 4- The large number of intellectual affiliations among politicians and their different views on the intellectual structure of federalism and ways to implement it.

5-3: The third main axis: Supporting balanced spatial development efforts (Table 6)

Table 6: Supporting Balanced Spatial Development Efforts

Strength points	Weakness points
The existence of previous develop- 1- .ment plans that have clear positive as- .pects towards regional development Sudan's abundance of natural re- 2- .sources Availability of qualified university hu- 3- .man cadres in the fields of development The possibility of integrating regional 4- development projects with national proj- .ects 5-The historical legacy of local agricultur- al expertise in the traditional agricultural .and industrial sectors Providing the components of regional- 6- .ly specialized local industries	The control of central development 1- .thought Some designs and objectives of na- 2- tional projects conflict with the goals of .balanced spatial development The infrastructure of development 3- projects requires huge financial re- .sources .Spatial divergence between regions 4- Regional acquisition of financial re- 5- .turns The dominance of traditional con- 6- cepts of land ownership among tradi- .tional groups 7-Problems of environmental degrada- .tion
Opportunities	**Threats**
1-High level of awareness of the impor- tance of overcoming the negatives of .previous development programs The global and regional trend of in- 2- .vestment in Sudan Providing a network of land roads and 3- railways linking the various regions of .Sudan Availability of regional data for natural 4- .resources	Weak programs to combat environ- 1- .mental degradation Tribal ownership of Sudanese lands 2- .and tribal disputes over them Investment preference for areas with 3- .high environmental security 4-The variation in climatic and ecologi- .cal characteristics of Sudan Rooting the concepts of regionalism 5- .among learners from marginal regions

5-4: The fourth main axis: The trend to benefit from the cultural composition of Sudan (Table 7)

Table 7: Orientation to benefit from the cultural composition of Sudan

Strength points	Weakness points
1-The common Islamic faith. 2-The positive richness of the cultural component of the Sudanese tribes. 2- Sudan's cultural diversity. 3- Cultural overlap of neighboring regions. 4- The spread of public and higher education. 5-The common origins of many tribes.	1- Incompleteness of the stages of formation of a single Sudanese culture. 2- The tyranny of tribal and ethnic loyalty and the intolerance of cultural fusion. 3-Weak concept of national education. 4- The weakness of the media supporting cultural fusion and the difficulty of accepting it among many tribal and ethnic societies. 5-The difficulty of getting rid of the concepts of the sovereignty of Arab culture.
Opportunities	**Threats**
1- The long coexistence of Sudanese cultural components in national agricultural projects such as the Al-Jazeera project and the Gedarief region. 2- The emergence of a common cultural component among residents of large and medium cities. 3- Weak ethnic tendencies among Sudanese abroad. 4- The existence of legislation guaranteeing the preservation of the privacy of cultural heritage.	1- The large number of tribal and ethnic components. 2- Regional separatist tendencies. 3- The distorted image associated with the imposition of Arab culture. 4 - Regional tendencies opposed to cultural fusion. 5-The abundance of local cultures within the administrative regions. 6-The high rate of illiteracy among the population. 7-The historical legacy of colonialism in the closed areas during the British colonization of Sudan.

5-5: The fifth main axis: Benefiting from the efforts made to keep Sudan geographically unified (Table 8)

Table 8: Benefiting from the efforts made to keep Sudan geographically unified

Strength points	Weakness points
1-Many peace agreements over a long period of time	1-The large number of political parties and their intellectual differences
2-The diversity of ideological affiliations participating in the peace agreements	2-Internal conflicts between the rebel parties
3-The richness of the political space with the concepts of identity, citizenship, belonging, and cultural pluralism	3-The concepts of identity and national unity are not firmly established
4-Achieving success in solving many of the problems of areas of historical conflict	4-The entrenchment of racist tendencies linked to the historical legacy of slavery and enslavement
	5-The change of governments in the First World and its connection to economic interests in Sudan
Opportunities	**Threats**
1-The understanding of the value of political stability has developed among many rebel parties	1-The increasing regional ambitions for Sudan's wealth
2-A change in the trend towards secession among some rebel movements	2-Competition between international poles and the repercussions of normalization with Israel in creating a political-societal division
3-Some competing regional powers seek to stabilize Sudan by investing in its rich resources	4-Armed conflicts in some neighboring countries, especially the existence of common ethnic ties
4-Growing awareness of the negative consequences of the secession of South Sudan	5-The early stage in the formation of the ""Sudanese people

5-6: The sixth main axis: Supporting balanced international relations (Table 9)

Table 9: Supporting Balanced International Relations

Strength points	Weakness points
1- Establish diplomatic relations with Sudan. 2-Sudan's participation in international and regional organizations such as the United Nations and the Arab League. 3-The importance of Sudan's geographical location to global poles. 4- Sudan's neutrality in its international relations. 5-Sudan's strong relations with China and Russia.	1- Sudan's dual status between Arabism and Africanism. 2- The weakness of Sudan's political and economic position. 3-The impact of foreign influence on Sudanese political positions. 4- Unilateral relations of the main political parties with some international parties. 5-The ambitions of some leaders of the rebel fronts.
Opportunities 1-The end of the era of international poles. 2-The emergence of concepts of exchanging benefits between countries. 3-The possibility of using the elements of the richness of natural resources and the geographical location of Sudan. 4- Internal consensus on democracy is a basis for governance. 5- Benefiting from the open globalized economy.	**Threats** 1- Internal political tensions. 2-The international polarization of some rebel groups. 3-The regional and international conflict over Sudan's resources in light of economic weakness. 4- Political instability in some neighboring countries. 5-The economic and ideological effects of globalization. 6- Renewing the old concepts of imperial colonialism.

5-7: A general summary of the most prominent strengths and weaknesses, and the most prominent opportunities and threats for all axes

SWOT ANALYSIS

Strengths and Opportunities	Weaknessand Threats
1-The country's trend towards computerization of natural and human resources.	1- The ineffectiveness of traditional methods used in preserving and analyzing spatial data for Sudan's natural and human resources.
2- The presence of government agencies specialized in the field of databases, such as the Ministry of Communications.	2- Inaccurate methods for actually evaluating the value of Sudan's various resources.
3- The many experiences of regional and local governance and their many positive aspects.	3- Lack of sufficient budgets to meet administrative requirements.
4- There are many contributions and visions from Sudanese thinkers.	4- Lack of agreement on administrative borders between states for historical and geographical reasons.
5- The existence of previous development plans that have clear positive aspects towards regional development.	5- The control of central development thought.
6- Sudan's abundance of natural resources.	6- Some designs and objectives of national projects conflict with the goals of balanced spatial development.
7- The common Islamic faith.	7- Incomplete stages of formation of a single Sudanese culture.
8- The positive richness of the cultural component of the Sudanese tribes.	8- The tyranny of tribal and ethnic loyalty and the unacceptability of cultural fusion.
9- Many peace agreements over a long period of time.	9- The large number of political parties and their intellectual differences.
10- Diversity of ideological affiliation participating in peace agreements	10- Internal conflicts between the rebel parties.
11- He established diplomatic relations with Sudan.	11- Sudan's dual status between Arabism and Africanism.
12- Sudan's participation in international and regional organizations such as the United Nations and the Arab League.	12- The weakness of Sudan's political and economic position.
13- Availability of the Internet, geographic information systems programs, and spatial browsers such as Google Earth.	13- The imbalance between the outputs of departments related to natural resources and the aspirations of the beneficiaries, whether governmental or private, local and foreign.
14- There is a lot of spatial data on Sudan's various resources available to government agencies (central and state), such as maps of minerals, water, soil, agricultural lands, population, and others.	14- Weakness or absence of communication between government agencies responsible for resources and internal and external institutions specialized in spatial data for natural and human resources.
15- The desire of many of the emerging movements for Sudan to remain united and for there to be an opportunity to take over the rule of their regions.	15- The presence of separatist tendencies in some regions and the demand for the right to self-determination.
16- Beginning to implement the signed peace agreements.	16- The historical legacy of slavery and slavery among some regional components.
17- Increased level of awareness of the importance of overcoming the negatives of previous development programs.	17- The large number of tribal and ethnic formations.
18- The global and regional trend of investment in Sudan.	18- Regional separatist tendencies.
19- The long coexistence of Sudanese cultural components in national agricultural projects such as the Al-Jazeera project and the Gedaref region.	19- Armed conflicts in some neighboring countries, especially in the presence of common ethnic ties.
20- The emergence of a common cultural component among residents of large and medium cities.	20- The early stage in the formation of the "Sudanese people"
21- The understanding of the value of political stability has developed among many rebel parties.	21- Internal political tensions
22- A change in the trend towards secession among some rebel movements	22- International polarization of some rebel groups.
23- The end of the era of international poles.	23- Regional and international conflict over Sudan's resources in light of economic weakness.
24- The emergence of concepts of exchange of benefits between countries.	24- The effects of economic and ideological globalization

6. 6- Vision, mission, strategic objectives, strategies, and projects to weaken/strengthen the negative/positive Sudan's central issues

6-1: The vision:Building a nationally and globally distinguished state that possesses the capabilities to enable it to remain cohesive in the present and future.

6-2: The mission: Using various methods to keep Sudan a cohesive country capable of progress and development.

6-3: Objectives:

1. Helping keep Sudan geographically cohesive.
2. Working to benefit from Sudan's natural and human resources.
3. Helping achieve balanced development commensurate with the nature of the regions geographically.
4. Sudan becomes a country with regional and international standing.

6-4: Strategic objectives, strategies, and projects: This strategy includes a number of strategic objectives, strategies, and projects as follows:

6-4-1: Objective 1: Strengthening the elements of Sudanese state administration.

- Strategy 1.1: Developing national development guidelines.
- Strategy 1.2: Building the institutions of the federal system
- Strategy 1.3: Strengthen means of cultural integration, taking into account the specificity of population groups

Strategy 1.1: Developing national development guidelines •	
Projects	1.1.1 Equal geographic expansion in national development projects. 1.1.2 Developing mechanisms for implementing balanced regional development. 1.1.3 Developing means of exploiting Sudan's natural and human resources.
Strategy 1.2: Building the institutions of the federal system •	
Projects	1.2.1. Raise the efficiency of the performance of regional and local administrations. 1.2.2. Developing the civil administration system. 1.2.3. Supporting the integration of regional and local administration units.
Strategy 1.3: Strengthen means of cultural integration, taking into account the • specificity of population groups	
Projects	1.3.1. Determine cultural fusion requirements. 1.3.2. Supporting the positive cultural heritage of population groups. 13.3. Developing educational curricula to support cultural fusion.

• Strengths, weaknesses, opportunities, and threats to the strategies for Objective 1: Strengthening the elements of Sudanese state administration.

strength point	Weaknesses
1. Abundance of natural resources at the regional level. 2. Many experiences in regional and local governance. 3. The richness of the positive cultural component. 4. Ethnic and linguistic overlap in many regions.	1. Weak infrastructure necessary for development projects. 2. Continuity of sovereignty of tribal borders. 3. Difficulty overcoming ethnic and tribal affiliation. 4. The spread of illiteracy among rural communities. 5. Difficulties in managing the natural environment

Opportunities	Threats
1. The desire of regional and global economic powers in the state's national projects. 2. The emergence of indicators of overlap and peaceful coexistence between components of urban Sudanese society. 3. The emergence of internal indicators among the various political forces to adopt the federal system.	1. The great regional variation in natural and human resources. 2. The large area of the regions and their different geographical characteristics. 3. Local communities' weak awareness of regional and local government authorities. 4. The strength of ethnic and tribal affiliation.

6-4-2: Objective 2: Expansion of rural development projects

- Strategy 2.1: Developing the traditional agricultural sector
- Strategy 2.2: Developing programs and plans to preserve components of the natural environment

Strategy 2.1: Developing the traditional agricultural sector •	
Projects	2.1.1. Developing various resource utilization programs throughout the year
	2.1.2. Reducing disparities within the modern agricultural sector
	2.1.3. Developing water management and sustainability projects
	2.1.4. Reconciling traditional agricultural and pastoral activities
Strategy 2.2: Developing programs and plans to preserve components of the natural environment	

Projects	2.2.1. Developing plans to preserve natural pastures and forests 2.2. 2. Developing traditional agriculture and pastoralism according to the components of the natural environment 2.2.3. Activating environmental protection laws 2.2.4. Developing an interactive management system between local and official components.

- Strengths, weaknesses, opportunities, and threats to strategies Objective 2: Develop programs and plans to conserve components of the natural environment

Points of strength	Points of weakness
1. Spreading awareness among rural communities of the consequences of the deterioration of the natural environment	1. The various difficulties associated with working mechanisms to return degraded natural environments to their original state
2. The presence of a scientific and applied legacy and human competencies to manage the natural environment	2. Difficulty implementing environmental laws.
3. The state's tendency to implement environmental standards for development.	3. The dependence of the population of the traditional sector on traditional means of livelihood.
4. The global trend to implement international agreements to protect the environment and reduce the effects of climate change.	4. Lack of environmental standards for investment.
	5. Smuggling operations of forest products and others to neighboring countries

Opportunities	Threats
1. A change in traditional nomadic patterns.	4- The increasing negative effects of climate change.
2. An increase in the monetary value of agricultural and animal products.	2- Competition from some investment entities to exploit the resources of the traditional sector.
3. Providing opportunities to benefit from the programs of the United Nations and various environmental protection organizations to preserve the environment.	3- The rapid population increase of the rural population and the difficulty of implementing family planning programs.
4. Development of applications for sustainable development programs.	4- Weak programs to replace energy sources and traditional building materials to keep pace with their modern, environmentally friendly alternatives.

6-4-3: Objective 3: Spread and strengthen technical and technological education at the general and higher education levels.

- Strategy 3.1: Expansion of technical education at the general education level
- Strategy 3.2: Expanding technological education at the higher education level

Strategy 3.1: Expansion of technical education at the general education level		
Projects	Increase/decrease the number of technical/academic secondary schools	.3.1.1
	Increasing vocational and vocational training institutes in basic education	.3.1.2
	Providing qualified cadres of teachers and technical administrators	.3.1.2
Strategy 3.2: Expanding technological education at the higher education level		

Projects	Establishment of specialized technical universities (agricultural, .3.2.1 (engineering, medical Linking technological education to labor market requirements .32.2 Establishing partnerships and cooperation with universities and .3.2.3 international research bodies

- Strengths, weaknesses, opportunities, and threats of strategies for Goal 3: Spread and strengthen technical and technical education at the general and higher education levels

Points of Strength	Points of Weakness
1- The richness of Sudan's experience in this field of education. 2- Community awareness of the importance of technical and technological education. 3- The existence of specialized councils to develop it. 4- Providing more job opportunities for graduates 5- Provides the possibility of supporting small self-projects	1- High financial and administrative cost 2- Difficulty keeping up with rapid technical change 3- The prevalence of notions of the superiority of academic education 4- The inferiority view of manual professions in society 5- Difficulty receiving international and foreign aid
Opportunities	**Weakness**
Increased value of technical and technical 1- .education in society The large number of graduates of university 2- theoretical specializations and the difficulty of employing them in the government and private .sectors 3-The presence of job opportunities for techni- .cians in the private sector Regional demand for technical and techni- 4- cal labor The willingness of many international bodies 5- to support technical and technological educa- .tion	The weakness of the Sudanese- economy and the deterioration of .the national currency Relying on external parties and 2- some local institutions to provide .the required support Society continues to view this 3- type of education as inferior to ac- .ademic education

6-4-4: Objective 4: Developing regional urban development

- Strategy 4.1: Raising the level of medium and small cities
- Strategy 4.2: Raising the level of regional urban service institutions
- Strategy 4.3: Strengthen the positive influence of regional urban development on the rural neighborhood

Strategy 4.1: Raising the level of medium and small cities •	
Projects	Establishing the economic criterion instead of population in classifying cities .4.1.1
	Applying modern urban planning and development standards .4.1.2
	Linking urban development to the central urban development network .4.1.3
Strategy 4.2: Raising the level of regional urban service institutions	
Projects	Developing educational, health, security, and other services .4.2.1
	Localization of high-return economic projects .4.2.2
	Allocating most of the investment returns to urban develop- ment .4.2.3
Strategy 4.3: Strengthen the positive influence of regional urban development on the rural neighborhood	
Projects	Transferring some urban tasks and services to important rural centers .4.3.1
	Balance urban and rural regional development plans .4.3.2
	Directing revenues from the rural economy to specialized “lo- calized” development .4.3.3

- Strengths, weaknesses, opportunities, and threats of strategies for Goal 4: Develop regional urban development

Points of strength	Points of weakness
1-The large number of intermediate and major cities in Sudan	1-Geographic disparity in the components of urban development
2-The existence of a national land road network	2- The prevalence of the concept of the national capital being superior to others.
3-The wide geographical spread of basic services	3- Availability of basic services in major cities
4-Weakness of the migration trend from the countryside to the cities	4- Weak regional urban infrastructure network
5-Providing the elements for regional urban development	5- The attractiveness of the “marginal” urban economy for rural people
Opportunities	**Threats**
1. The move towards adopting federal rule	1. The urban disparity between levels of Sudanese cities
2. High cost of living in major cities	2. Administrative difficulties in implementing urban development plans
3. Signs of adverse migration from cities to the countryside begin	3. The effects of globalization and the trend toward city-dwelling
4. The emergence of some urban centers competing with some major cities	4. Lack of clarity in the vision related to the inevitability of urban disparity among some regional authorities

6-4-5: Objective 5: Encouraging reverse migration that attracts rural areas

- Strategy 5.1. Supporting small rural development projects
- Strategy 5.2. Providing the necessary elements for rural survival
- Strategy 5.3. Develop practical plans to support the rural economy

Strategy 5.1. Supporting small rural development projects	
Projects	5.1.1. Supporting microfinance projects for productive rural families 5.1.2. Developing family agriculture projects, especially those related to rural women 5.1.3 Developing Rural Agricultural Associations
Strategy 5.2. Providing the necessary elements for rural survival	
Projects	5.2.1. Providing various basic services 5.2.2. Keeping pace with changes in the requirements of rural life 5.2.3. Developing traditional rural livelihoods
Strategy 5.3. Develop practical plans to support the rural economy	
Projects	5.3.1. Raising the differential value of rural products 5.3.2. Direct link between rural product and global crop markets 5.3.3. Develop plans for rural development independent of national development plans

- Strengths, weaknesses, opportunities, and threats of strategies for Objective 5: Promoting attractive reverse migration to rural areas

Points of strength	Points of weakness
1. Availability of rural production components 2. Availability of cheap labor 3. The predominance of the rural population over the urban population 4. Availability of a national and regional road network 5. Opening up the local and international market for special rural products such as gum Arabic	1. Traditional means of production for the rural economy 2. The difficulty of introducing modernization among rural people 3. High financial cost 4. Environmental degradation and fragility of ecosystems 5. Tribal disputes and conflicts 6. Overlapping boundaries of tribal and administrative ownership

Opportunities	Threats
1. Investment trends in rural areas	1. Tribal and ethnic conflicts
2. The state's adoption of development thought based on balanced development	2. The deterioration of the Sudanese economy
3. Provides many basic rural services	3. Weak budgets allocated to rural development
4. Restoring the natural environment of much of what was lost	4. The wide gap between urban and rural areas
	5. The many and overlapping concepts of rural development and the different schools

This proposed a geographical strategy may help achieve the objective of remaining Sudan one cohesive state. Here, it is necessary for the Sudanese, the politicians, and those in charge in particular, to become familiar with Sudan's geography, as it will enable them to lay solid foundations for how to manage their country politically, economically, and socially

References

(1) Abdel Fattah A. December 21, 2018. Bernard Lewis's plan to divide Sudan and Egypt. Al-Rakouba electronic newspaper. (Arabic)

(2) Abushouk, A.I.2010. The Anglo-Egyptian Sudan: From collaboration mechanism to party politics, 1898-1956.

(3) Al-Bawaba. January 2011. America sponsors the division of Sudan and Israel expands its influence. www.albawaba.com (Arabic)

(4) Albdel-Alatif, A. B. 1996. The religious dimension of the South Sudan issue. Center for Strategic Studies, Khartoum, p. 31. (Arabic)

(5) Alredaisy, S, M.A. 2012. Land grab by tribal groups in a fragile environment: ''Hawakir of Wadi Salih'' in southwestern Darfur, Sudan. World Journal of Young Researchers (2): 17-25.

(6) Al-Tanaib, Jassim. 9/26/2019. Bernard Lewis. The Godfather of Partition 2-2. Al-Anbaa www.alanba.com.kw (Arabic)

(7) El-Toam, Mahdi Amin. 2020. United States of Sudan. Facebook page. (Arabic).

(8) El-Toam, Mehdi Amin. 2017. Do we need chapter six? Facebook page (Arabic).

(9) Asharq Al-Awsat Newspaper - January 25, 2020 - Issue 15033 - The Sudanese government signs a framework peace agreement with the SPLM in Juba. (Arabic).

(10) Collins, R., Richard H.1961. Early British administration in the southern Sudan. The journal of African history 2 (1):119-135.

(11) Davies, H.R.J. 1986. The human factor in development: some lessons from rural Sudan. Applied Geography 6 (2): 107-121.

(12) Deng, F.M., Medani, K. 1996. “Civil war and identity in Edmond J., Keller, E.J, Rothchild (Ed): Sudan’s foreign policy” In: Africa in the new international order, D. pp.100-118. Boulder, Col.: Lynne Reiner Publishers.

(13) Deng, F.M..1998.Africa’s dilemmas in the Sudan. The World Today: Chatham House Review 54 (3):72-74

(14) El Shair, I.M. 2015. Ethnic groups and the emergence of South Sudan: A study in socio-political geography. J. of social affairs 52 (2454):1-26.

(15) Elnur, I 2009. Contested Sudan: The political economy of war and reconstruction. Routledge.

(16) Gunnar, M., S.2010. Local violence and international intervention in Sudan. Review of African Political Economy 37 (124):173-186.

(17) https://www.c-r.org/our-work/accord/sudan

(18) Idris, A..2012. Rethinking identity, citizenship, and violence in Sudan. Int. J. of Middle East studies 44 (2), 324-326.

(19) Johnson, D.H. 2014. Federalism in the history of South Sudanese politics though. Rift Valley Institute. Refworld.org

(20) Khaled, Mansour. 2000. South Sudan in the Arab Imagination, the False Image and Historical Repression. Heritage Publishing House, London, pp. 161-163. Sudaneseonline.com. Quoted by Ayman Al-Taj. (Arabic).

(21) Khalid, M. 2003. War and peace in Sudan: A tale of two countries. Routledge

(22) Machar, R.T.D.1995. “South Sudan: A History of Political Domination - A Case of Self-Determination”. Ben.Parker@dha.sasa.unep.no (Ben Parker)Subject: document Message-Id: c51_9511191041@sasa.unep.no

(23) Magnusson G. 1969. Production under risk. Almqvist and Wiksell Boktryckeri AB, Uppsala, Sweden.

(24) Mamdani. M. 2010. Saviors and Survivors: Darfur, politics, and the war on terror. Three Rivers Press,

(25) Oded, A. 2006. Israeli-Ugandan relations in the time of Id Amin. Jewish political studies review 18(3/4): 65-79.

(26) Sputnik Arabic. 2017. An opposition organization calling for dividing Sudan into autonomous regions. Arabic.sputniknews.com (Arabic).

(27) Various peace agreements, the most recent of which is the Juba Peace Agreement in 2020 between the transitional government and the armed movements. (Arabic).

(28) Woodward, P. 1987. Is the Sudan governable? Some thoughts on the experience of liberal democracy and military rule. British J. of Middle Western Studies 13 (2): 137-149.

(29) Yagoob, A., Ting Zou. 2016. Patterns of economic growth and poverty in Sudan. J. of economic and sustainable development 7 (2).

(30) Ylonen, A. 2005. Grievances and the roots of insurgencies: Southern Sudan and Darfur. Peace, conflict, and development: Interdisciplinary Journal 7:99-134.

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